

Foreword

When I first started this instruction manual, it seemed like an easy thing to accomplish in a short period of time. Was I ever wrong! From the time I wrote the first manual an incredible number of changes occurred and even more changes have taken place while I have been writing this second version.

This really speaks to the commitment we have to the Online Learning Center and how valuable your input has been in making the Online Learning Center such a success. The authoring environment is critical to the success of the OLC because this is how you enter your courses into the site and make them available to the student.

I am proud of the work we have accomplished on this site and welcome you to our family of authors. Please keep your comments and suggestions coming. Through you we can make continuing education a positive experience for the hundreds of thousands of professionals across the world.

Introduction

The purpose of this manual is not to teach you how to be an instructional designer. Instead you will learn how to use the Module Factory and SMART Center (Synchronized Meeting and Real-time Training Center) to deliver instructional content to your particular audience on The Online Learning Center. Those of you already familiar with the Module Factory and SMART Center will see an incredible number of new features designed to enhance the students learning experience. Those of you who have never been on the Module Factory or SMART Center will see an easy to use interface designed to convert existing course material into web based content. While I have said the purpose of the book is not to teach you how to be an instructional designer, I would be remiss if I didn't include a small chapter on how instructional design has evolved from its humble beginnings into what it is today.

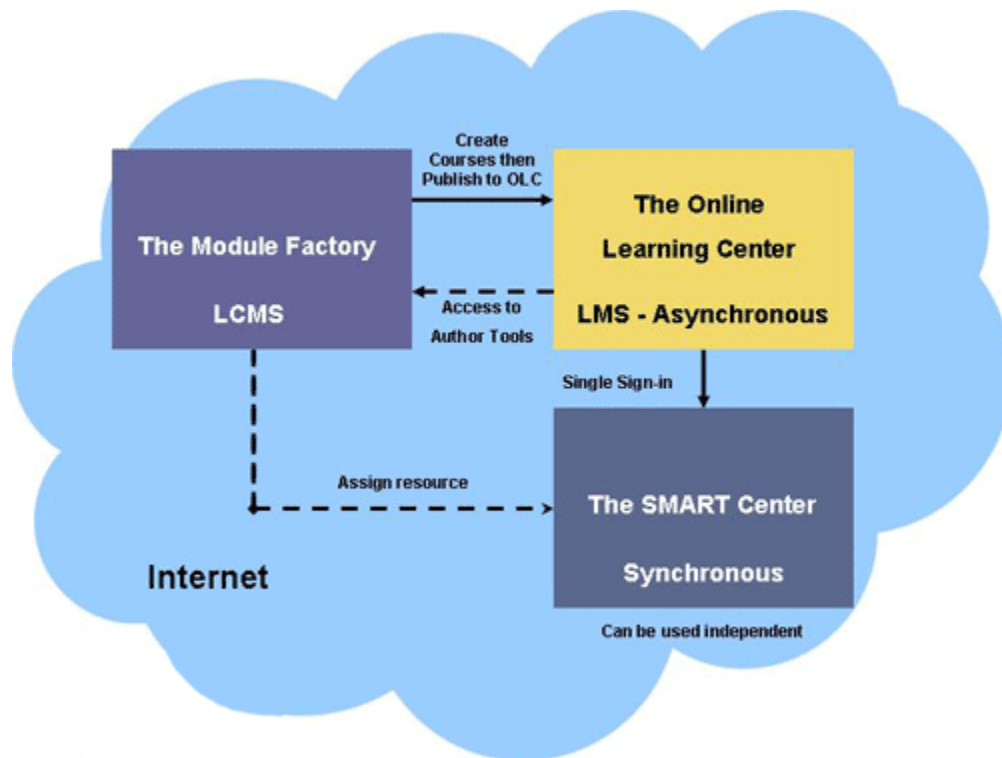
As you proceed through the content of this manual, examples will be introduced to help explain each part of the Module Factory and SMART Center. While cookbook style manuals can be extremely helpful in providing a step-by-step learning experience, they can also hinder the creative inner you. Because of this, I will try to provide as many examples as possible. These examples will lead you through various difficulty skill levels.

If you haven't guessed by now, I tend to be a conversational style writer and try to bring you into my world (which can be a pretty scary place) with the purpose of relating my experiences and others who have helped evolve the Module Factory and SMART Center into what it is today. Due to the nature of software, enhancements come about on a regular basis which is why this book is designed to be delivered over the Internet. You have probably heard the statistic that an Internet year is 3 months. For us at the Online Learning Center we work on a much faster timeline to deliver new enhancements to make your authoring experience and that of your student more enjoyable.

Now that I have thoroughly confused you by using three Internet site names, let's move into the first chapter. There I will explain how each site becomes one.

Chapter 1 – Site Structure

There are three distinct sites that you can, and most likely will, use. All of them tie into each other to provide an incredible array of instructional content delivery methods. The Online Learning Center is the one you have heard about most while the other two are equally as important. Let's break them down into digestible entities.



In the diagram above you can see the relationship of the sites to each other. Note that all the components are contained on the Internet.

The Online Learning Center

The Online Learning Center, or OLC as I will refer to it throughout the manual, is the main content delivery area. This is where all the students will come to take courses. The OLC is comprised of nine important areas:

1. Registration and Login Screen
2. Course Catalog
3. Shopping Cart
4. Study Area
5. Testing
6. Certificates
7. Profile
8. Bookstore
9. Alert boxes

The basic process an individual will go through is very simplistic. When they arrive on the site, they will register as a first time user. After registering they will be able to select a course from the

catalog. Currently the course catalog is set up by modality or specialty area. Due to the volume of modules the course catalog will be redesigned to make it easier to view. The student will select a module or case study from the catalog and place it in their shopping cart. Purchasing from the Online Learning Center is similar to any of the online e-stores and is extremely secure. The student will add a course to their shopping cart and then

The screenshot shows the homepage of the Online Learning Center for medical professionals. The header includes the site name, navigation links (ABOUT, REGISTER, COURSE CATALOG, CONTACT US, HELP), and the date (April 22, 2004). A tagline reads: "Experience learning in a simple, fun and cost-effective way, without travel, anytime, anywhere, at your convenience." The main content area features a computer monitor displaying a brain scan, a CD-ROM labeled "the online learning center", and a "SPECIAL PRESENTATIONS" section. The special presentations list three free webcasts: "MRI of the Knee and Shoulder - HSS Orthopaedic Review Course" by Hollis G. Pitter, MD; "The Radiologic Evaluation of the Spine" by Richard J. Herzog, MD, FACR; and "Musculoskeletal Ultrasound" by Ronald S. Adler, PhD, MD. A "LOG IN" box is visible on the right, along with a "Special Welcome" message and a "Philips Medical Systems is a proud member of" logo for the New England Learning Association. The footer contains copyright information for Philips Medical Systems NA.

click on “Checkout Now” to complete the transaction. We use Verisign for both security and credit card processing. All security including credit card transactions are encrypted at 128-bits which is the highest level of security next to some of the CIA and Pentagon encryptions which are not for public use. On a side note, we **DO NOT** keep credit card numbers in our database. After the transaction is completed, the number is erased and cannot be recalled and is not viewed by human eyes. This prevents any hacker from obtaining financial information. We also use a very secure firewall to keep all other information safe. Under no circumstance do we sell or give our user database away. Privacy is of the utmost importance and we value the business we receive from the medical community.

Once the module/case study has been added to the study area, the user will click on the title of the module. This will launch the module in the primary internet browser. The OLC recommends the latest version of Microsoft Internet Explorer, Mozilla, or Firefox. We have thoroughly tested against these browsers and find they offer the best user experience. Each module uses the same basic structure where the author defines the Title, Objectives, Outline, Study Content, Search, Glossary, and Test. Page navigation is accomplished through Next and Previous arrows. For those individuals who do not have the time to study the module all in one sitting, the OLC maintains a bookmark of where the user left off and allows the user the ability to pick up where they left off. There is a Notes section where the user can type notes about the material they are studying. These notes can be recalled and printed out so that the user can review specific information they feel is important to them.

We specifically use the term “Module” due to the fact that a course could contain multiple modules like in the case of the Perry Sprawls Series. That particular category offers the user 15 modules and is considered a complete course.

Case Studies are slightly different. We took a page from our Ultrasound business line partner, with their blessing, and opted for a patient chart style approach. The case study is broken up as follows: Introduction, Medical History, X-Ray, Ultrasound, Computed Tomography, MRI, Nuclear Medicine, Interventional Procedures, Pathology/Laboratory, Library and Test. There may be instances where not all of the chart tabs are used due to the fact that some imaging procedures may not be indicated or provide little additional interpretive data. Like the module, the case study has a notes section so that the user can enter information they feel is important and either print out or review as they proceed through the module.

After a student has completed a module or case study, they can take the assessment test and receive a grade along with a certificate. The list of accrediting institutions is growing rapidly and we now offer courses to Radiologic Technologists, Ultrasonographers, Nursing, Emergency Medical Service personnel, and Biomedical Engineers. The passing grade for each of these organizations varies anywhere from 70% - 80% depending on their requirements. After a test has been successfully completed, the individual is granted access to a certificate which can be printed out in the form of a basic certificate page or a page that looks just like a certificate. Currently certificates are maintained for four years.

The student also has access to the content for a period of 1 year along with their completed test and study guide which helps explain what questions they may have missed and why. The study guide is not intended to be an answer guide, i.e., giving the individual the exact answer, only a guide to help them figure out where they went wrong and help them reach the right answer through studying the content area they missed. This will change dramatically when we start going toward the SCORM standard. There we will be able to tailor learning experiences based upon knowledge. Sections not completed successfully could require restudy and then retesting. I will get more into the testing component later but suffice it to say this area measures not only the student's ability to comprehend the material it also provides important feedback to the author on how well they present the material.

Another recent addition to the Online Learning Center is the CD module. Any module can be converted to a CD based module with the permission of the author. The cost of the CD module is slightly more expensive due to the cost of the media, shipping, and handling. The CD offers the student the ability to study offline rather than having to be online for the entire module. This is a big advantage for students with slow connection speeds or those who would rather have the CD for reference. The student must be online to take the test and this requires the use of a security code to access the test. The code is keyed to one individual user and *cannot* be shared. Each student must have their own copy in order to successfully complete the module. Currently Case Studies cannot be converted to CD although we are investigating this.

The Profile area is a private area for the student to maintain their personal information. A student can modify the registries, address, email address, and password. We recommend that a student validate their profile on a quarterly basis. This way all their information is up-to-date.

YOUR PROFILE

You can update your registration at any time by clicking [here](#).

Your Order History allows you to view all your orders. Here you can print out a copy of your receipts for your records. This is a running record and will contain all orders.

YOUR ORDER HISTORY

You can view your order history by clicking [here](#).

The Bookstore is an area for students to purchase books by a particular author, title, or search for books similar to the module they are studying. The author has the ability to add a suggested book to the course within the authoring tools. The Bookstore uses Amazon.com as the processing agent.

BOOKSTORE

You can view the bookstore of course related materials by clicking [here](#).

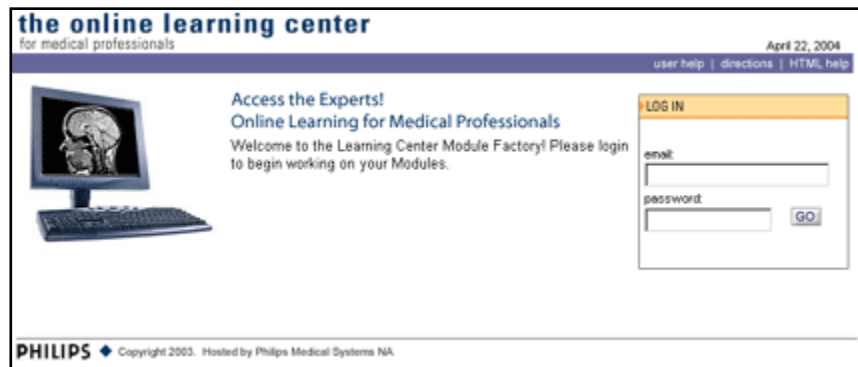
Alert Boxes are used to notify students of new courses, free modules that have been added to their profile, etc. Currently this function is limited to Online Learning Center managers. A request may be made in writing (email) to tech@theonlinelearningcenter for inclusion of a specific alert box.

New Course in Nuclear Medicine

Hi Bob, As a nuclear medicine technologist you are invited to take the course on PET Imaging. Don't forget the ASRT Conference in June in Dallas, TX!

The Module Factory

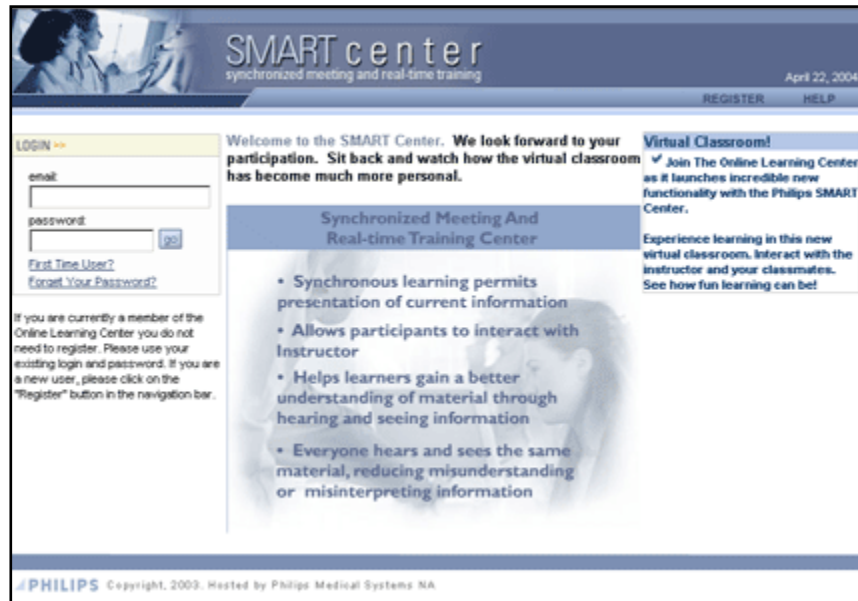
The heart of the Online Learning Center is the Module Factory. All courses are written in the Module Factory. This includes creating the outline, study content, tests, etc. The Module



Factory was designed to be an easy to use, intuitive, authoring environment. No web programming experience is necessary although there is the option to use html coding if desired. The functions of the authoring environment are so numerous that I am not going to take the time to outline them here. Instead I will wait until we proceed into the next chapter. Suffice it to say, an author will be presented with a wide array of tools designed to provide a rich learning experience. The authors experience in instructional design is really the only limit.

The SMART Center (Synchronized Meeting and Real-time Training)

The SMART Center enables the instructor to create a synchronous event. When we talk about synchronous and asynchronous events, the classic Online Learning Center for continuing education is really considered an asynchronous learning experience due to the fact that the author has no real contact with the



student other than through surveys or through a discussion thread. With the advent of the SMART Center synchronous learning has been added to the repertoire. An instructor can create a course in the Online Learning Center and then point to an online live event in the SMART Center where student-teacher interaction is encouraged.

The SMART Center was designed to use a common plug-in versus a java applet or the need to download complicated software. That common plug-in is the Macromedia® Flash™ player and is resident on most computers. If for some reason the plug-in is not installed, a link is provided to the Macromedia® website where a free download is provided.

The SMART Center contains all the tools necessary to display images/slides along with an area for audio and video of the presenter. Tools on the whiteboard allow the instructor the flexibility to draw arrows and annotate any of the images. An archive of the live event can also be created for those unable to attend the live session. During a live webcast a roster is displayed of all participants along with a chat area where they can type questions in to the instructor. The instructor also has the ability to send the participants to another website where additional support material may be delivered.

Wrap up

While the appearance of the SMART Center varies from that of the Online Learning Center, we did that intentionally because they can be used in conjunction with each other, or more important, separately.

Now that the basic elements of the sites have been explained, let's go ahead and talk about instructional design and then put it all together.

Chapter 2 – Instructional Design

The Internet has grown over the past few years into what can only be called a catalyst for knowledge sharing and with that the ability to more easily access the experts who create that knowledge. As a Web designer and author I am the first to admit there is an incredible amount of exceptional information on the Web but unfortunately there is also an equal amount of really bad information. When doing research on the Internet you do need to be careful that what a student gets from their experience is well documented and reliable. Many times the Internet can be used as a clearing house for what I like to term as junk knowledge.

Distance education should not be thought of as a way to eliminate instructors but rather how to add a new learning environment to your already existing instruction method. The Internet can help create self study, mentoring, and other education programs to supplement the classroom experience. In some cases it can replace the classroom experience but instructors are still necessary to create the material and be available to answer questions and help direct the student. Institutions looking at reducing staffing through distance education are misguided and ill informed. Internet based content takes time to create and upload. I have seen figures anywhere from 90-150 hours per single hour of online content. A well know example of the online learning degree program is the University of Phoenix. Currently all class work is performed online from the student's home, work, or wherever they happen to be. Existing degree programs include Bachelor, Master's, and Doctorate level programs and talk is underway for creating high school level courseware. The University of Phoenix is highly successful and they have an incredible number of instructors on staff to direct and mentor their courses.

How to Evaluate Existing E-learning Programs or Sites

A great way to assess instructional design is to go out to other sites and determine:

- What you like best about the site.
- What don't you like about the site?
- Did you learn something new, like a new task, that you weren't able to do prior to taking the course?
- What was it that enabled you to learn and how was it different from existing learning techniques that you employ?
- If you didn't learn anything, why do you think this is the case? What prevented you from learning?

I have created a list of sites in the reference section for your use.

When looking at sites, you also should be looking at how they present their content. There are many different learning methods that can be deployed across the Internet. Some of these include:

- Static pages containing text and graphics
- Animations
- Simulations
- Tests, surveys, and other assessment techniques
- Asynchronous interactions through discussion threads and emails
- Synchronous event with whiteboard, reading material, assignment posting, and polling
- Multimedia presentations

The Online Learning Center takes into account all the above deployment methods and allows you to tailor your course material in any manner you prefer. When you evaluate how to best deliver your content, you will probably go through several iterations before you are satisfied with the results. Beware the pitfalls of what many authors fall into including:

- Using multimedia that requires special software and long download times - Remember many of your students may be using a slow dial up connection. This does not mean avoiding multimedia and graphics, only being aware of what your students might experience and planning for it. In many of the graphics and multimedia software programs you can determine the download time required and adjust them to suit Internet usage. There is a special section in this book about working with images and multimedia.
- Avoid large amounts of scrolling. Try to chunk the material into mini pages. This helps in the retention of the material.
- If you use discussion forums, be sure to monitor them. Too often instructors fail to go into the discussion groups and respond to the students. Without guidance students often get sidetracked and the discussion goes off on tangents totally irrelevant to the subject.
- Don't avoid simulations. These prove to be a valuable learning tool and allow the student to practice what they learn.

Chapter 3 – The Module Factory

Introduction

First of all let me welcome you to the online education authoring tools, more commonly called the Module Factory. The Module Factory was designed to make the overall process of module creation for the Online Learning Center as straightforward as possible. There are certain steps you must follow and although they may sound trivial, they will save you time in the end.

You should complete your document in an electronic format prior to proceeding, preferably a “text” format. This includes creating your learning objectives, comprehensive outline, test questions with four multiple choice answers and study guide. Authors not requiring accreditation can also use other question types including; True/False, Fill in the Blank, and Multiple Response. All graphics must conform to the size and format specified in this book under the heading Upload Graphic and Media Files. In addition to the authoring guidelines there are several documents you will need to complete and send to Philips Medical Systems. These may include a resume, completed and signed ASRT Release form and Philips Medical Systems authoring contract. A copy of the ASRT Release form has been attached for your review. ***Note: This pertains to authors submitting their work for accreditation through Philips Medical Systems.***

Please review this chapter thoroughly before you begin! You will notice that these guidelines are written in the order you should follow when creating a module. As you become more familiar with the Module Factory you can modify how you work with the authoring tools to suit your particular style.

Accessing the Module Factory

Accessing the Module Factory from your computer is a breeze. The beauty of the Module Factory is in the fact that it is accessed directly from the Internet. All of the work you do is entirely online. This helps eliminate the panic that comes from computer crashes and work that has not been backed up. Remember that dissertation or the major report that you had been working on for days and a power surge or blackout damned your document to the realm of the dead? I sure do! That is why we decided to minimize that event from happening on our site.

In order to become an author you must register on the Online Learning Center as a new user. If you have never registered before, click on First Time User or Register at: <http://theonlinelearningcenter.com>

After registering contact one of the following individuals to be given access as an author.

1. Robert Carter at: Robert.Carter@philips.com
2. Paula Sanderson at: Paula.Sanderson@philips.com
3. Barbara Lebron at: Barbara.Lebron@philips.com

The browser of choice is Internet Explorer 5.5 or 6.0 or higher. The other browsers of choices are Mozilla, which can be downloaded from: <http://www.mozilla.org>, and Firefox which can also be downloaded from: <http://www.mozilla.com>. The examples in this document are taken from Internet Explorer 6.0.2 and Mozilla. Here is the procedure on how to check for the version of browser installed on your computer.

For Internet Explorer:

Launch Internet Explorer.

Click on Help and then select About Internet Explorer. The window to the right will appear. The Version is the top number on the screen and in the case of my computer is currently version

6.0.2900.2180.xpsp_sp2_rtm.040803-2158



For Mozilla:

Launch Mozilla.

Click on Help and then select About Mozilla. The screen to the right will appear with the version of Mozilla. In the case of this screen, 1.8a2 is the version.



For Firefox:

Launch Firefox.

Click on Help and then select About Mozilla Firefox. The screen to the right will appear with the version of Mozilla Firefox. In the case of this screen, 0.9.2 is the version.



After being granted access as an author, you will log back into the Online Learning Center. On your home page you will see a new tab across the top named “Author Tools”.

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Visit Philips Global
log out
September 14, 2004

YOUR HOME | ABOUT | COURSE CATALOG | STUDY | CERTIFICATES | MANAGER TOOLS | **AUTHOR TOOLS**

SEARCH | YOUR BASKET | HELP | DISCUSS
You have no items in your basket.

Your Home
Welcome Mr. Robert B. Carter!

YOUR PROFILE
You can update your registration at any time by clicking [here](#).

YOUR ORDER HISTORY
You can view your order history by clicking [here](#).

BOOKSTORE
You can view the bookstore of course related materials by clicking [here](#).

What multimedia viewer are you using most often?
 Windows Media Player
 RealPlayer
 Quicktime

How to Get Started:
To get on your way at the Online Learning Center, browse through our course catalog by clicking [here](#) or by clicking the Catalog Button on the toolbar.
Or you can search for a course that matches your specific needs by clicking [here](#) or by clicking on "Search" on the second row of the toolbar.
Once you find courses you want to study, you will be guided through the purchase process.
To study courses you have purchased, click [here](#) or click the "Study" button on the toolbar.
All the courses you have studied and passed are available on the Certificates page by clicking [here](#) or by clicking the "Certificates" button on the toolbar.
For more information click [Help](#) at any time.

New Course in Nuclear Medicine
Hi Bob, As a nuclear medicine technologist you are invited to take the course on PET Imaging. Don't forget the ASRT Conference in June in Dallas, TX!

PET Imaging
A new webcast is now available for Philips Sales Personnel on PET Imaging. This webcast was presented from Milpitas, California on February 20th to the Philips Sales force.
This informative lecture spoke on the physics of PET, our Product Offering and how it fits into the Philips Sales portfolio.
In order to access this course go to Essential Product Training and select PET Imaging.

Click on this tab to be taken to the Module Factory login screen.

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for medical professionals

April 22, 2004
user help | directions | HTML help

Access the Experts!
Online Learning for Medical Professionals
Welcome to the Learning Center Module Factory! Please login to begin working on your Modules.

LOG IN
email:
password:

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Along the top of the login screen is three links: User Help, Directions, and HTML Help. User Help is specifically used to alert the technical person and the programmers of a problem you are encountering with the site. This is for technical not routine problems. Make sure you fill out all the fields prior to submitting it. Be sure to include any error code you may have received. This will help pinpoint the exact problem and enable the programmers to make the necessary changes. The directions link will bring you to a PDF copy of this document. You can either print it out or refer to it online for assistance. HTML Help is provided as a basic guide to html for the non-programmer. Remember

html is NOT necessary to author in the Module Factory. If you have a question about how to do something in the Authoring Tool, please contact Robert Carter at: robert.carter@philips.com

Enter your email address and password exactly the same as the email address and password you designated when registering on the Online Learning Center and click on “Go”. If you have difficulty logging in please email one of the names on the contact list and they will respond to you promptly. Any one of them will be able to assist you in retrieving your password or answering questions you may have. If you are getting an error message, other than your email or password is not recognized, please use the User Help button located in the header bar on any of the screens.

After entering your email address and password, you will be taken to the “Your Modules Screen”. When you first start a new module as a new author, you will only see the sections. **NOTE: The icons shown below will not be available to you until you create a new module. You can then see the icons if you click on Your Home or logout and then log back into the Author Tools.**


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for medical professionals

May 18, 2004
user help | directions | HTML help

the module factory


Your Modules:

Welcome to the Module Workshop for the Online Learning Center, where you will find the tools you need to create learning modules. Don't hesitate to contact us here if you have questions or need support. To start creating a new module, click the arrow below. Or to continue working on a module in progress, find it in the list below. In order to preview a module you must already be signed in to theonlinelearningcenter.com.



























Show All Modules

















Review ▾

ID	Title	Preview
82	Applied Anatomy of the Brain	































Under Construction ▾

ID	Title	Work on Module	Grades Report	Delete	Request Publication	Preview	Discuss
55	test Flash						
89	The World Wide Web De-mystified						
164	Webcast Test						
372	Online Learning						

Published ▾

ID	Title	Number Sold	Work on Module	Grades Report	Preview	Discuss
219	Planning for HIPAA: An Executive Summary	32				
221	HIPAA Security: Keys to Compliance	39				
299	PET Imaging	43				
345	Breast Ultrasound	0				

Archived ▾

ID	Title	Work on Module	Grades Report	Delete	Request Publication	Preview	Discuss
108	Online Literature Store						
166	Mx8000 Family Presentation						
167	MxView						
168	CT Competitive Multiple Review						
169	Mx8000 IDT Sales Training						

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Your Modules

“Your Modules” contains all of the modules that you are constructing, have submitted for publication, have published or have been discontinued.

- Review – is an area for reviewing modules. This area is especially important for the accrediting agencies. They can review the module and take the test as many times as needed. None of the test scores will be recorded. Chances are you will never see this unless you have been asked to review a module.
- Under Construction - are modules that you are actively editing. These modules are not live to the public.
- Submitted for Publication - are modules that have been completed and are being reviewed for publication by the Online Learning Center. Again, these modules are not live to the public.
- Published - are modules that are live to the public. These modules have received accreditation.

- Discontinued - are modules that have exceeded the one year publication time frame and have either lost accreditation or the material has become outdated and is no longer relevant. Authors will be notified ahead of time to review their module and determine if new content is warranted, if no changes are warranted, or if the material is no longer relevant.

There are multiple tools available on this page for your convenience. One of the most important is the “Create New Module” button in the top right corner. That topic will be covered in the next section.



This is the “Work On Module” icon. When you click on this icon it will allow you to edit your module including creating the outline, adding images and media, etc.



This is the “Grades Report” icon. This icon allows you to create assignments and also grade assignments. Let’s take a quick look at this page. Click on the icon and you will be brought to the page shown here:

the online learning center
for medical professionals

September 14, 2004
[grades report](#) | [your home page](#)

the module factory [grades report](#) ↓

This section is where you are going to post assignments and assignment grades as well as final grades for each user that has purchased and taken this course.

You are currently working on Module 423 - module creation

Assignment/Discussion group
Below is a list of all current assignments for this module. Click on “Grades Report” to grade an assignment for an individual user. You may also start a new discussion group, or post messages on existing threads.
[Add a Discussion Group to the Module](#)

Group Name	Post Message	Threads	Grades	Options

This section is where you are going to post the final grades for each user that has purchased and taken this course. You can select a date range that you want to work on, or view all records.

Start Date: End Date:

Name	Date Purchased	Final Grade	Options

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On this page you can create a special Discussion Group or Groups for the module. This enables you to create assignments for your students and allows them to post to the thread. Once your module is live you can set a start and end date to display the students that have enrolled in the course and then assign grades and final grades. This is mainly for courses that are conducted for other than CEU or CME.



This is the “Delete Module” icon. When you click on this icon it will delete the module from your working list. This operation is final! You

will be warned once but clicking on the delete icon again will permanently delete your module. There is no way to recover a deleted module.



The “Request Publication” icon sends the module to the final editor for review and publication. Click on this icon when you want to signal the publisher that you have completed work on the module and it is ready to go live.



The “Preview Publication” icon creates a temporary page that allows you to see what the finished page will look like when it goes live. Additionally, it displays any HTML programming you may have incorporated into your module. Please note that you are able to preview your module in the Authoring environment and the preview will show within the Learning Center environment.



The “Withdraw Publication” icon. When you click on this icon it will send the module from the Submitted for Publication category back to the Under Construction category, allowing you to work on your module.



The “Discuss” icon allows you to monitor threaded discussion topics associated with your module.

Each module will have its own set of icons. The modules “Under Construction” will have Work on Module, Grades Report, Delete, Request Publication, Preview, and Discuss icons. A brief discussion of the Icon functions is noted in the previous section.

In the “Submitted for Publication”, you will have access to Withdraw Publication, Grade Reports, Work on Module, Preview, and Discuss icons.

In the “Published section”, you will have access to the number of modules you have sold, Preview, Grade Reports, and Discuss icons. The Work on Module will not be available to authors whose work is accredited by education organizations such as the ASRT, SDMS, and others due to strict guidelines by the accrediting agencies. Authors who use the Online Learning Center for purposes other than continuing education can request that their modules be accessible for editing. These authors can include sales and marketing business lines as well as education facilities.

Create New Module



This is the “Create New Modules” icon. When this icon is clicked you will define a new module.

You will be taken to the Module Title page.

Authoring Your Module

You have taken the first important step in creating your own module. The next steps are, what I call, logically sequenced. The site was developed to follow this logic especially for returning authors who have modules under development. In order to make this document more meaningful and easier to follow, I am going to start breaking the steps down into ordered steps.

Title/Cover

After clicking on the Create Module Now button, you will be brought to the Title & Cover page as shown.

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for medical professionals
September 14, 2004
title/cover | learning objectives | add/edit outline | sections | glossary | pretest | test & study guide | combine content/outline | prerequisites
resources | media upload | image upload | preview | your home page | the online learning center | logout

the module factory
title & cover ↓

Module Title:

Cover Image: [view selected images](#) [view all images](#)

OR

Cover Media:

Notes to Learner:
(will be displayed on the cover of your module)

PDF's:
(Select PDF's to be made available on cover for downloading)
(To deselect an active PDF file, hold down on the ctrl (control) key and left mouse click on the active pdf file name.)

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If not, click on the Title/Cover icon so that you see the page above. The title is determined when you create the new module but can be changed as appropriate.

1. Images or media can be added to the cover if you wish. You will probably want to add this towards the end of the authoring project. Remember to follow the directions in the Upload Graphic and Media Files section and special consideration should be given to the image on this page to make sure it is smaller than your other images. The reason for this is the image/media is shown beside

some of the text and large images may require the student to scroll horizontally to view the entire image.

2. Notes to the learner should be entered here. These notes should not be confused with learning objectives. Instead a brief description of the course may be entered. Text may be cut and pasted from other open application screens right into the text entry area.
3. You have the ability to add a PDF file or files. This could be a typed version of the module that a student can print out or supplemental material. **Note: DO NOT include the test in the file.**
4. Click the “Submit” button to save any changes.
5. You may view the cover as it will appear to the user by clicking on the “Preview” link. Another browser window will open showing you exactly how your module will look to your students.
6. Note: It is a good idea to view each section in the staging area as you go along. This will help you identify mistakes (especially if you are using HTML) and allow you to alter information as necessary.

Structure

The Module Factory steps are displayed in a logical sequence as shown here. Course development should be followed in these steps:



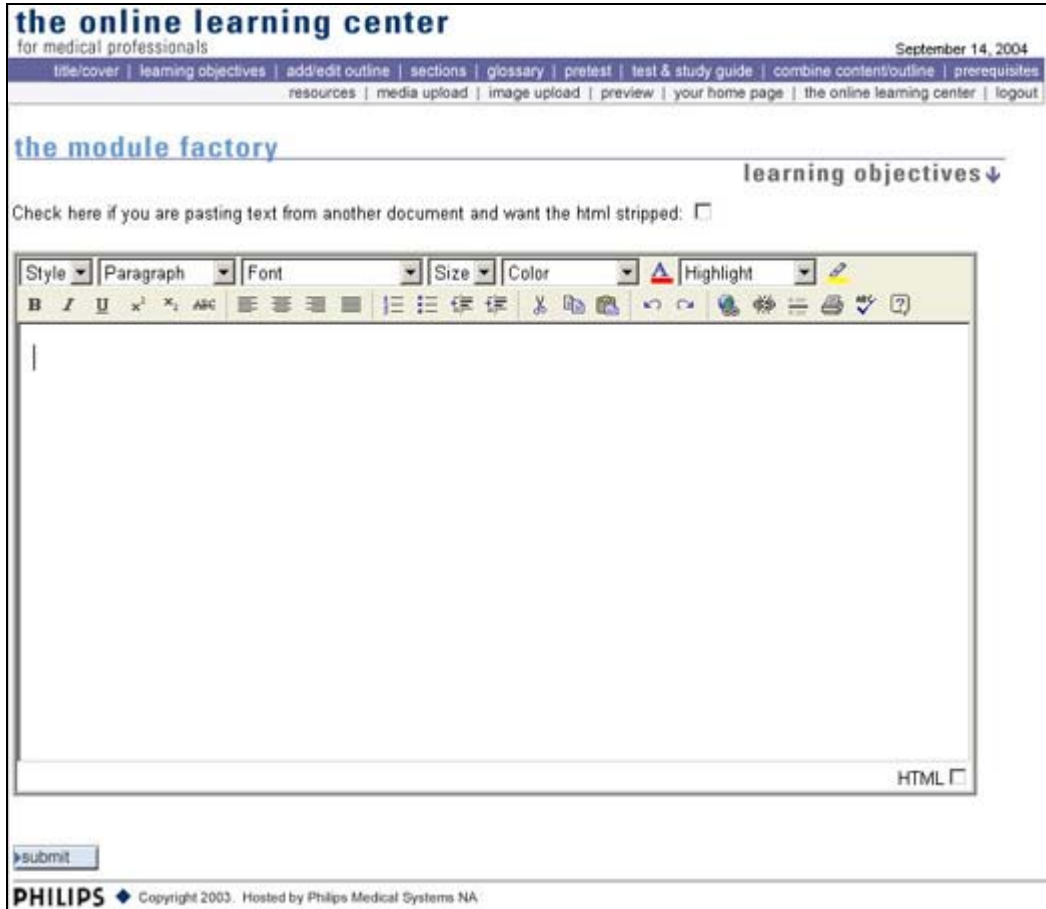
1. Title/Cover (Already done in creation of title)
2. Learning Objectives defined for the learner
3. Add/edit Outline
4. Upload Media and Images for this module
5. Sections: Create and Edit
6. Define Resources
7. Define Glossary
8. Create Pretest, Test, and Study Guide – Note: The Pretest is optional
9. Combine Content and Outline
10. Define Prerequisites
11. Preview Module

As you become more and more familiar with the process you can deviate from the ordered steps above but this is the easiest way to create a module.

Learning Objectives

Learning Objectives are used to tell the student what they are expected to learn from a module.

1. This section is strictly for text. You can use the copy & paste method from a text editor or you may type directly into the text box of the content editor within the Module Factory.



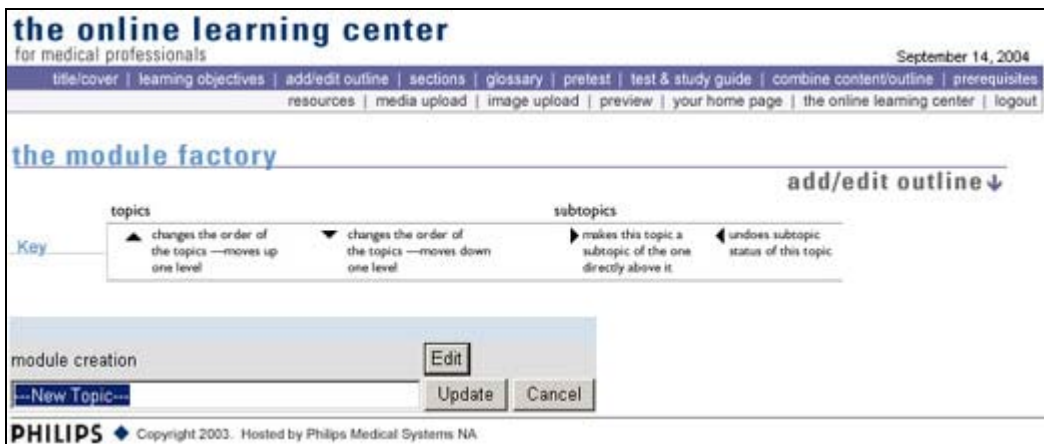
2. Always click on the “Submit” button before continuing on to the next task including previewing the module.

You have all the formatting capability within the Module Factory content editor including ordered and unordered lists, bolding, italics and more.

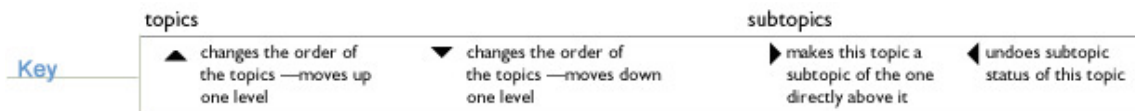
Add/Edit Outline

Text preparation is one of the most critical areas for successful deployment of your course module. The most critical element is the Outline. We have used the ordinal/sub-ordinal method for outline design.

1. The Outline is broken up into topics, sub-topics, sub-subtopics, sub-sub-subtopics, etc. You have the ability to decide what level you want to drill down to based on your content.
2. Content may be placed under any level of the outline.
3. In order to enter your first topic you will select Add Topic. This will place the first topic on the page. Note if you use the Add Topic feature it adds the item at the ordinal or sub-ordinal level that is shown. You can change the level and indent or decrease indent using the arrows. When you click on the Add Topic button, a forms box will appear showing the text “- Add Topic-”. Highlight the text in the box and then enter the appropriate text.



4. You can even change the order of the topics using the arrows. Again, this is extremely helpful if you decide to change your course and either add a section or move a section to a different level.





Important!
 A subtopic may be reordered as a topic and its location may be changed using the appropriate arrows.

Media Upload/Image Upload

Of all the sections you will interact with, this is probably the least straightforward because of how the internet acts with images and files. Don't let this frighten you though because it is also one of the most rewarding.

I can't reinforce enough how important this section is. Please read this entire section. Before you enter content into the body of your module, you will want to import your images and media into the database. This will allow you work more efficiently by placing text, pictures and media as they are arranged in your electronic document. This way you will have a library to work with.

Graphic and Media Formats:

Probably the first thing we need to cover is what file formats are acceptable for the web. Let's start with graphics and then we will move on to other media files.

Graphic Files:

1. .jpg – Appropriate for all graphics and best for images/photos
2. .gif – Appropriate for small graphics with 256 colors or fewer
3. .png – Appropriate for all graphics depending on how images are saved

1. Image Specifications:

- a. All images must be in .gif, .jpg or .png file format.
 1. With this new authoring system thumbnail images can automatically be generated for .gif and .jpg files.
 - b. Animated .gif files will also be accepted
 - c. Your Module “Cover” Image must be no wider than 229 pixels and no taller than 350 pixels.
 - d. All other images (figures) should be one of the two recommended physical sizes:
 1. 548 pixels wide by approximately 273 pixels high. Height is not as important as width. Consider 548 pixels by 273 pixels the maximum size your image should be because the Learning Center uses a field of 790 pixels width. Graphics take up some of that space effectively reducing the usable area to 640 pixels in width. Remember height is not as important because you can scroll down if necessary. On the other hand, you want the entire horizontal area of your image to appear without scrolling.
 2. 274 pixels wide by approximately 117 pixels high. Again, height is not as important as width.
 3. Personally, I would advocate graphics smaller than 274 pixels wide **if possible**. Don’t compromise size for quality.
2. What’s a pixel equal to in inches? Actually that’s a good question and it varies depending on the resolution in pixels/inch.
 - a. Assuming 1024 pixels/inch, 1 pixel = 0.001 inches
 - b. Assuming 512 pixels/inch, 1 pixel = 0.002 inches
 - c. Assuming 256 pixels/inch, 1 pixel = 0.004 inches
 - d. Assuming 128 pixels/inch, 1 pixel = 0.008 inches
 - e. Assuming 72 pixels/inch, 1 pixel = 0.014 inches
 3. What should you use? Here again, that is a really good question because the larger your graphic, the larger your file will be and consequently the longer it will take to upload on the screen. I try to plan for the worst case scenario which is a computer with a 28.8kbps modem or Web TV. The average graphic should use 72 pixels/inch and be 25-30k in size. You should not use more than two images per page as a general rule.
 4. How do you decide what file format is best for your graphics? A good rule of thumb is .gif images are good for general graphics with text. Graphics that include images should be saved as .jpg or .png files.
 5. You can hire a professional graphics person to manipulate your existing graphics or generate graphics to your specifications. You can expect to pay between \$85 and \$125 per hour for this type of service depending on your location. There are photo service bureaus that have a wealth of clipart and photos for purchase. Some computer stores have disks for sale containing royalty free graphics and photographs. Before using these graphics be certain that you are not infringing on copyright laws.

Creating Graphics:

Creating graphics is well beyond the scope of this document and could fill a library however, there are some simple packages and some extremely complex and powerful programs available as well as some compromises. Do you need a graphics program? Well, that all depends on you and what you want to convey to your reader.

1. Probably one of the most effective tools I would recommend, if you are a beginner, is Microsoft® PowerPoint™. This allows you to create some fairly complex slides with images, text, bullet points, and pointers. PowerPoint™ will convert its slide format into either gif or jpg files automatically in the Save as... function. Big Note: Use solid background colors. Do not use a gradient fill for .gif format files. You will see bands of color rather than the nice gradient you applied and it also adds many more colors which will increase your file size.
2. You're beyond PowerPoint™ and want to create some of your own graphics from scratch... Great! Chances are you don't need my recommendations but if you want to start delving into uncharted waters, then my first recommendation for a graphics program would be Paint Shop Pro®. This is an exceptional program for not a lot of money (around \$100). There is even a free trial at <http://www.jasc.com>. This is probably the most competitive package to the larger more expensive programs. An animated .gif package comes bundled as part of the program.
3. Photoshop™ is without question the standard in graphics along with Illustrator™. These high-end graphics programs are published by Adobe®. Illustrator™ is a vector-based graphics program and is not for the faint of heart. Vector graphics tend to be smaller files but the learning curve is steep. Photoshop™ is extremely versatile and will pretty much allow you to do anything you can imagine with graphics. The major drawback with Photoshop™ is price. You can expect to pay around \$650 for this program. ImageReady™ comes bundled with Photoshop™ and is great for creating animated .gif files and web ready files including slices and buttons.
4. Macromedia® Fireworks™, is another versatile graphics program. Fireworks™ integrates with the other Macromedia® programs including Dreamweaver™, Director™ and Flash™. It will automatically create its own html code for buttons, etc. Fireworks™ also has a built-in feature for creating animated .gif files. You can expect to pay around \$300 for this program. Fireworks™ makes extensive use of the .png graphics file format.

Screen Capture:

Sometimes it is convenient to capture a computer screen to demonstrate a concept. This is extremely popular when training people to use software or show them what their screen should look like. Again there are many types of screen capture tools leading from a single screen capture, to an animated gif, to even more advanced techniques like movie captures. I confess that I am a software junky. I have pretty much tried a seemingly

endless number of products to my wife's dismay. I have settled on a few that I routinely use and would recommend depending on your application.

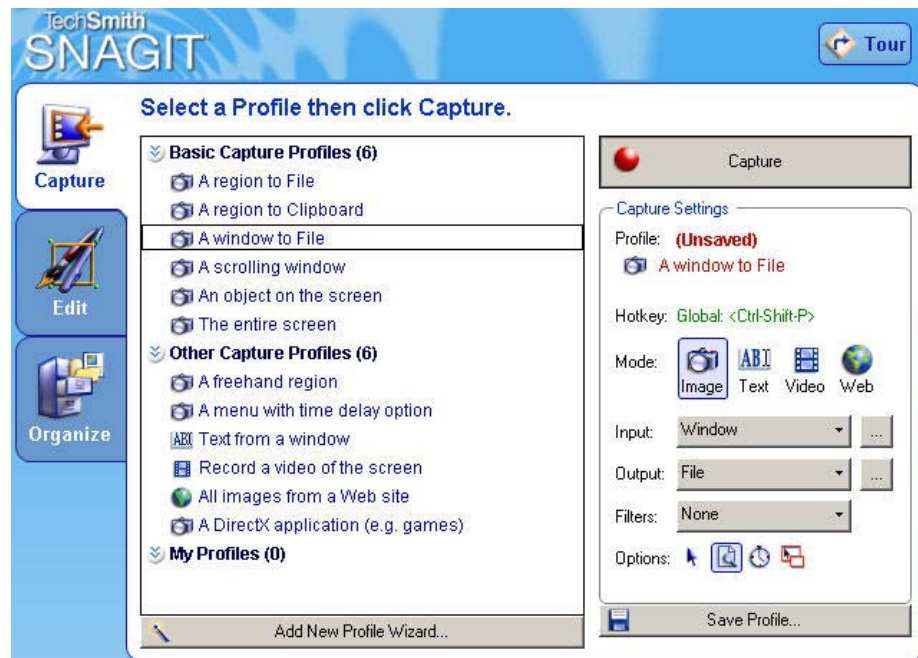
While you can use the Print Screen feature on your computer, this is often not adequate for your purposes so let's move on. I find that I rarely if ever use the Print Screen feature because it is so limited.

SnagIt™

The first screen capture software I would recommend is SnagIt™ from TechSmith®. This handy screen capture tool is extremely versatile and may even fill many of the functions that Paint Shop Pro™, Photoshop™, and Fireworks™ provide. I have included screen captures, fancy that, of the different possibilities that SnagIt™ offers. The cost of this software is about \$40 and I would say a bargain at twice the price! You can preview SnagIt™ at <http://www.techsmith.com> .

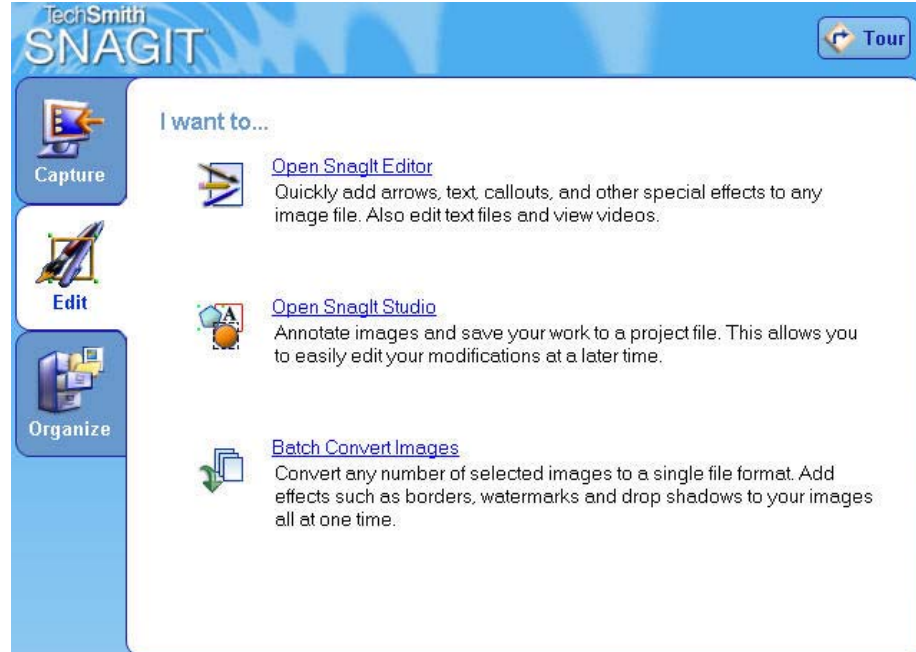
Capture:

As you can see, the SnagIt program allows you to save images, text, small video, and web images. There is also a variety of tools that allow you to capture full screens, windows, and regions.



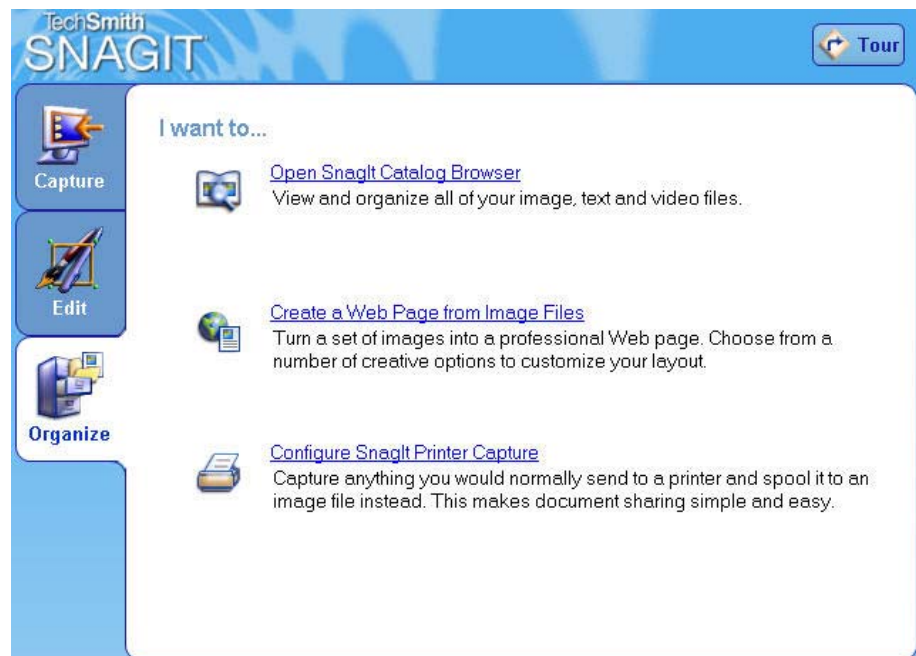
Edit:

SnagIt™ has many editing features that enable you to draw arrows, add text, callouts, and more. They even have the ability to add more complex image formatting such as drop shadows.



Organize:

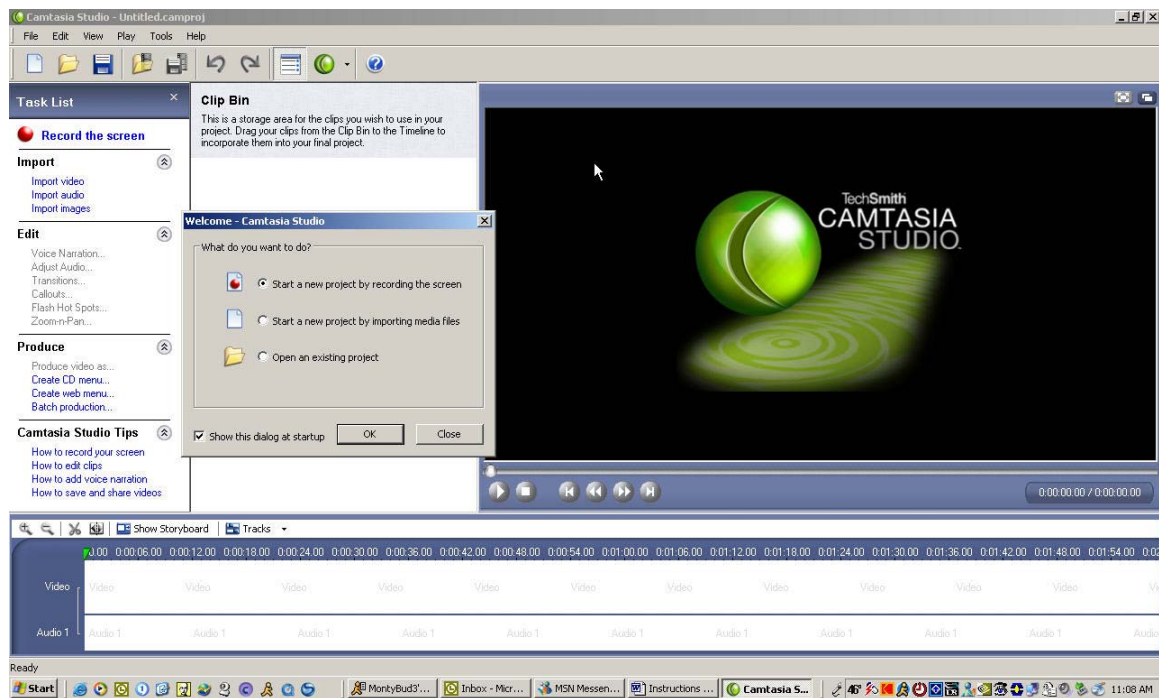
The organize feature enables you to create your own catalog of images. While the web page function is nice, you won't need it with the OLC. There is also a print feature where you can create an image file of a document. This



is a neat feature that enables you to take a Word™ document, or other document, and print it to a file. This is similar to the Acrobat® Distiller™ in that you can print to a file. It does NOT replace Acrobat® Distiller™ because it cannot create a PDF file.

Camtasia Studio™

TechSmith® also has a great screen capture tool called Camtasia Studio™. This is more like a movie screen capture rather than a single screen capture. Here you can simulate a complete learning event including audio. This is an extremely powerful tool that I would advocate if you do PowerPoint™ presentations on a routine basis and you want to capture the presentation for future use. It can also be used for demonstrating how to use a HIS/RIS system or any other software program. Some of the demonstration files in the online “book” are done using Camtasia Studio™. Unlike SnagIt™, after you capture the video, you have the ability to manipulate a timeline, add audio after capture, add hotspots, and so much more. The cost of Camtasia Studio™ is \$300 but again, it is a bargain. If you are looking for a low end video production package, Camtasia Studio™ can meet many of your needs. I wouldn't advocate it for creating high-end video and it cannot be used for DVD authoring but overall a very good software package.



The beauty of the programs offered by TechSmith® is that you can try before you buy. They do not limit the functionality like many other companies. They are full featured programs.

Turbo Demo®

Turbo Demo® has a very good package that simulates actions. It is a screen capture tool that enables you to simulate actions on a computer. It is not a movie style capture like Camtasia™ rather it fills in the gaps from one capture to another. One of the advantages of Turbo Demo® is that you can even have the user interact with the program, for

instance, entering numbers in a Microsoft® Excel™ program. The program can require actions before moving on to the next step. There are two versions of Turbo Demo®, Standard and Professional. The cost is somewhat steep, \$600-\$900 depending on version, but if you intend to do a lot of simulations requiring student interaction then this may be for you. You can preview Turbo Demo™ at <http://www.turbodemo.com> .

RoboDemo™

Finally Macromedia® has a program called RoboDemo™ that is similar in nature to TurboDemo®. The cost is similar, \$600. RoboDemo™ converts files directly to the Macromedia® Flash™ format for integration into a learning module.

Media and the Internet:

Wow, where do I begin with this topic. There are so many different software programs that address this and yet each one has features and benefits over the other. So please, when you evaluate a program for your own use, make sure it does what you want it to do because some of these programs can be quite expensive and the learning curves vary greatly!

Probably the biggest consideration when you decide to use video is; can your PC handle it both in terms of processor speed and memory and then again when it comes to storage? I have grown my home PC to almost a terabyte of storage space because of the amount of video I do. Next stop petabyte and then exabyte. My PC also uses a 2 GHz processor and 1 GB of RAM (Random Access Memory). I will be purchasing another PC with a minimum of 3.4 GHz processor and 2 GB of RAM expandable to 16 GB of RAM and I am considering a dual processor. Do you need this type of configuration? Probably not but the more processing power you have the easier it will be to work with video. Laptop computers can also be used quite effectively and the beauty of portability is the ability to take your video on the road for capture and processing. When considering what software program you want to use, read the minimum specifications to make sure your PC meets these requirements. Getting back to hardware for a moment, in order to import and export your video files, you will need to have either firewire or USB2 connectors or both. Laptops can add PCMCIA cards to accommodate these connectors or specialty adapters like a video capture card. The other option is to have external plug-in devices that connect to your AV equipment and allow you to import the media into your computer. These devices still require firewire or USB2 connectors depending on your external converter.

The other consideration is whether you want to do this work yourself or have it done elsewhere. Personally I really enjoy working with video and believe that as Internet access becomes faster, bi-directional video will replace how we learn today and we are taking some of those steps now through the SMART Center. You can expect to pay hefty

fees for a media agency to convert video and then tailor it to your specifications. The going rate is anywhere from \$125-\$225/hour. You can plan on a minimum of 6-8 hours for each video of about 1 hour.

Ok, off my soapbox. Let's get into what is really behind video and how to make it work for the Internet. Video over the Internet can be quite challenging, especially given the connection speeds of your users. In an academic or hospital environment you typically deal with broadband connections including, DSL, LAN, T1, and even T3 so video becomes less restrictive. Now how about the student that lives off campus or in a rural area? Many of them are constrained to dial-up access of 56k modems and usually do not connect at the higher baud rate. If you are planning on a video being 1 Megabyte (MB) or less then you can consider using an MPEG, SWF, or AVI file format (a breakdown of these abbreviations is shown in the next section). There are programs available that compress video files and they work quite well. If you are planning on using video on a routine basis then you may want to check these programs out. Any media file larger than 1 MB should be streamed. Streamed media is a technique where a certain amount of the media is buffered on your PC so that as the media plays, the temporary cache is not emptied until you reach the end of the media. I am sure you have been on the Internet, gone to a video file, had it play for a short amount of time, stop and then resume playing. That is an example of media that is not streamed or streamed properly. There are many different types of streamed media but they require special servers to do this... until recently. The most common streamed media includes WMV, RM, and MOV files. Fortunately we have three of the most common media servers, the Window Media™, Real Media™ and Flash Communication servers. There is a new streamed media format FLV. This is a new media format and did, up until recently, require a Flash Communication Server™. With the new Flash™ MX 2004 Professional version, Macromedia® integrated a new actionscript feature called Net.stream that allows the user to stream media without a server. Pretty neat, huh? The only problem is that it requires you to have Flash™ MX 2004 Professional at a cost of \$700. I'll talk about that a little more as I go through the different software programs.

Pinnacle® Studio™

Pinnacle® Studio™ is an entry video software program. You can get an AV, DV, or Deluxe version. The AV version requires putting a video board in your PC to accept the video and audio. The DV version comes with a video board but can go through an existing firewire™ port on your PC. The Deluxe version comes with a video board that accepts a breakout box that accepts SVHS, composite video and dual channel audio. A really nice feature of the box is that it has both input and output connectors. The video board contains two firewire™ connections.



Capture software allows the videographer to control their digital camera from the computer monitor. The editing software allows the author to create very complex video sequences, lay down an audio track, overdub audio, incorporate transitions, create titles

and more. One of the really nice editing features is the ability to create DVD chapters. You wouldn't use this for the Internet but for other projects, it is great. After you have finished creating your video, you can write the video to a number of formats. I try to accommodate the typical user or allow the student to choose the format appropriate for their connection. The stream format can create both Windows and Real Media formats in Low, Medium, and High Bandwidth. If you do decide to use this type of video, let me know and I can help you upload to the appropriate server.

Pinnacle® also has professional editing software available for those who want to go the extra distance. Liquid Edition™ is one of those programs. It is not for the faint of heart or the casual user. I would advocate this for authors dealing primarily with video. The Professional version includes a video board and breakout box.

Pricing varies but for the AV or DV version you can expect to pay about \$130. For the Deluxe version, you can expect to pay \$250. Liquid Edition™ costs between \$700 and \$1000 depending on the version you choose. If you are interested in looking into the Pinnacle products, you can find them at: <http://pinnaclesys.com> .

Adobe® Premier™

Adobe® Premier™ allows you to do non-linear video editing. It is deemed to be a higher level editing program similar to Liquid Edition™. You can expect to pay about \$700 for this program. Like other manufacturers, Adobe® touts the integration of Premier™ with many of its other programs such as Photoshop™, Effects™, and more. I have used older versions of the program but elected to depart from it. You can find more information on this product by going to: <http://www.adobe.com> .

Sony®

Sony has a variety of product offering for use with video and audio. Probably the most popular is their Vegas™ suites. They can be pricey but they do offer an incredible amount of latitude in creating your videos. Typical price is around \$800-900.

Microsoft®

If you are using Microsoft® Windows XP™ then they offer a free movie editing program called Windows Movie Maker. This is a free download and it can produce a decent movie file with transitions and even dubbed audio. It is worth a look if you are unsure whether video is for you.

Macromedia® Flash™

Flash™ MX 2004 Professional has the ability to import video into a SWF™ (shockwave flash) format that can be added directly to the authoring environment. The original video format is converted into a FLV (flash video) file. Flash™ has components built in to the program that enables you to embed the video into a player template. Typically FLV files

need to be streamed from a Flash Communication Server. However, the new Professional version has action scripting that allows you to create a NETStream object that does not require a streaming server. This program requires advanced knowledge and is definitely not for the beginner. If you do decide to use Flash™ then I would recommend taking classes to learn the program and then advanced classes to learn action scripting. Flash™ is an extremely powerful program and should eventually become part of your library.

Media Files:

Media files fill a broad file extension range and can include sound, movies, and more. Below is a list of file extensions that may be used.

1. Sound
 - a. .wav
 - b. .au
 - c. .wma
 - d. .ra
2. Movies
 - a. Shockwave™ and Flash™ - .swf
 - b. Flash™ - FLV
 - c. MPEG - .mpg, .mp3, .mp2, .mpv
 - d. Quicktime™ - .mov
 - e. .avi
 - f. Microsoft Media™ - .asf, .wmv
 - g. Real® - .rm
3. Microsoft®
 - a. PowerPoint™ - .ppt
 - b. Word™ - .doc
 - c. Excel™ - .xls
4. Executable Files
 - a. .exe
5. Adobe® Acrobat Reader™
 - a. .pdf

Remember, like image files, media files can take a long time to download. Using vector-based programs like Flash™ can help reduce the file sizes and make for a much more pleasant user experience.

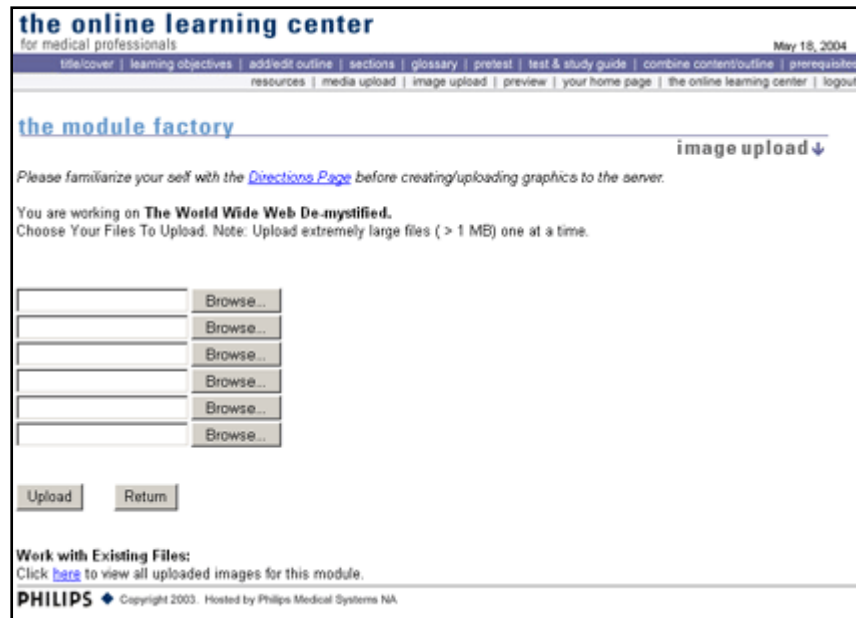
File Naming Conventions:

1. Make sure that you use a standard naming convention. Example:
 - a. topic1fig1.gif
 - b. topic2fig1.jpg
 - c. topic1_fig1.gif
 - d. topic2_fig1.jpg
 - e. topic1-fig1.gif
 - f. topic2-fig1.jpg

1. When naming your files **DO NOT** use special characters, extra spaces, or dots (periods) such as:
 - a. topic1fig#1.gif
 - b. topic 1 figure 1.gif
 - c. topic1fig1.gif.gifMost databases and html programs don't like these unconventional names and you **will** get errors when you try to view your module.


Now, let's upload some files.

1. Make sure you are on this screen. If not then click on "image upload".
2. Click on the "Browse" button. This will allow you to select files from your computer's hard drive and upload them to the server.
3. If you are uploading .gif or .jpg files to the server, thumbnails will be made automatically.
4. You are given the option to upload up to 6 images at a time. Remember, however, that if your image files exceed 1 MB you will want to upload them in smaller increments unless you have a very fast internet connection speed.
5. Click on the "Upload" button. This final action will upload your file to the server.
6. There is a section called "Work with Existing Files". The first area "Click here to view all uploaded images for this module". If you click that button you will see the screen to the right. This function lets you view all the images that you have uploaded to the server.



Uploading Media

1. Uploading Media is really the same as uploading images. You are going to use the same step as above in uploading images.



The screenshot shows a web interface for 'the online learning center for medical professionals'. At the top right, the date 'May 18, 2004' is displayed. A navigation bar contains links: 'title/cover', 'learning objectives', 'add/edit outline', 'sections', 'glossary', 'pretest', 'test & study guide', 'combine content/outline', 'prerequisites', 'resources', 'media upload', 'image upload', 'preview', 'your home page', 'the online learning center', and 'logout'. Below this is a section titled 'the module factory' with a 'media upload' link and a dropdown arrow. The main content area contains instructions: 'Please familiarize your self with the [Directions Page](#) before creating/uploading media files to the server. Use the height and width parameters for media such as Flash files that require sizing. (Default is 640 by 480) You are working on **The World Wide Web De-mystified**. Choose Your File To Upload.' There is a text input field with a 'Browse...' button. Below it, 'Width:' is set to '640' and 'Height:' is set to '480'. There are 'Upload' and 'Return' buttons. At the bottom, it says 'Work with Existing Files: Click [here](#) to view all media files for this module.' and 'PHILIPS Copyright 2003. Hosted by Philips Medical Systems NA'.

2. Click on the “Browse” button. This will allow you to select files from your computer’s hard drive and upload them to the server.
3. Where the upload deviates is in this step. You will need to indicate the height and width of your media files. The default size is 640x480 pixels. You will need to change the default settings to match your file. **Note: The size must be in pixels!** You will need to do this if you are uploading Flash™ files, Quicktime™ Movies, or other media files to ensure your file is proportional and does not appear distorted when viewed by the user. This step is mandatory!

It’s time now to start adding content to your module. You are going to be working with sections. Sections are simply pages at the topic or subtopic levels. If you have not done so already, click on Sections. You will see the following page which will contain the Module number and Title of the module you are working on. This is verification so that you can change modules if necessary.

Sections

There are several commands on the page including:

1. Add New Section – adds content to the module
2. Add Discussion Group to this Module – creates function where your students can ask you questions about the module and can be observed by other students. Similar to a newsgroup. Files can be posted also for your review
3. Link a book to this module – if you have a book that corresponds to the module you can recommend that they purchase the book through Amazon. This feature takes them directly to Amazon and allows them to purchase through secure credit card transaction.

the online learning center
for medical professionals

September 14, 2004

[title/cover](#) | [learning objectives](#) | [add/edit outline](#) | [sections](#) | [glossary](#) | [pretest](#) | [test & study guide](#) | [combine content/outline](#) | [prerequisites](#)
[resources](#) | [media upload](#) | [image upload](#) | [preview](#) | [your home page](#) | [the online learning center](#) | [logout](#)

the module factory sections ↓

DIRECTIONS: This is where you enter the content for your module. Content may be entered in any one of the following areas: Title/Cover; Learning Objectives; Sections (this is the area where you will enter the bulk of your content); Test and Study Guide; the Glossary. Once you have entered all that information, you can work on the Add/Edit Outline Area as well as Combining the content/outline. Throughout this process you may upload images as well as media files at anytime by clicking on the upload button. To return to your homepage to work on a different module, simply click on the "your home page" button on the navigation bar.

Follow the steps on your left to create or edit your content. You are working on: [MODULE 423 : module creation](#)

[Add New Section](#) | [Add Discussion Group to this Module](#) | [Link a book to this module](#)
 Section Title
 Introduction

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Add New Section

Click on Add New Section. This will allow you to add sections to the module. A section is considered a content area. You have two choices on this lead in page. The first command is to Add new item to this section and the second is Add new quiz me to this section. Let's start off by Add new item to this section.

1. Typically, you will start with a sequence number of 1. How sequences work. As I have said previously, a section is considered a page. You have the ability to decide how much information you want on a page through sequences. Consider a sequence a paragraph within a page. Sequence numbers govern the order in which the paragraphs are shown within a topic of your course.
2. One of the special features of this section allows you to disable the right mouse click function on the student's computer. This will prevent any download of images or content to their computer through the "Save Target As..." or "Save Image" functions. Now, there are always ways around this and believe me where there is a will there is a way. We are investigating advanced methods of no print screen and no image capture but again, these are extremely difficult to implement but we understand the desire to keep all you information as proprietary as possible.
3. Enter the section title and click "Continue".

Add New Item to This Section.

By clicking on this link you will launch the Content Editor.

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[title/cover](#) | [learning objectives](#) | [add/edit outline](#) | [sections](#) | [glossary](#) | [pretest](#) | [test & study guide](#) | [combine content/outline](#) | [prerequisites](#)
[resources](#) | [media upload](#) | [image upload](#) | [preview](#) | [your home page](#) | [the online learning center](#) | [logout](#)

the module factory

items ↓

Editing Section: Introduction
[Add new item to this section](#) [Add new quiz me to this section](#)

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The Edit Sections screen is fairly straightforward. The Section Sequence Number and Section Title that you assigned on the previous screen carry forward.

the module factory

items ↓

You are working on: **module creation**



Section Title:

Introduction

HTML

Disable right mouse clicks on this section

This is where you may enter 1 or more items containing content for your course. The sequence is used to indicate the display order of the items within this section. The heading is optional. Each item can contain text, images, and/or a media file.

Sequence:

1

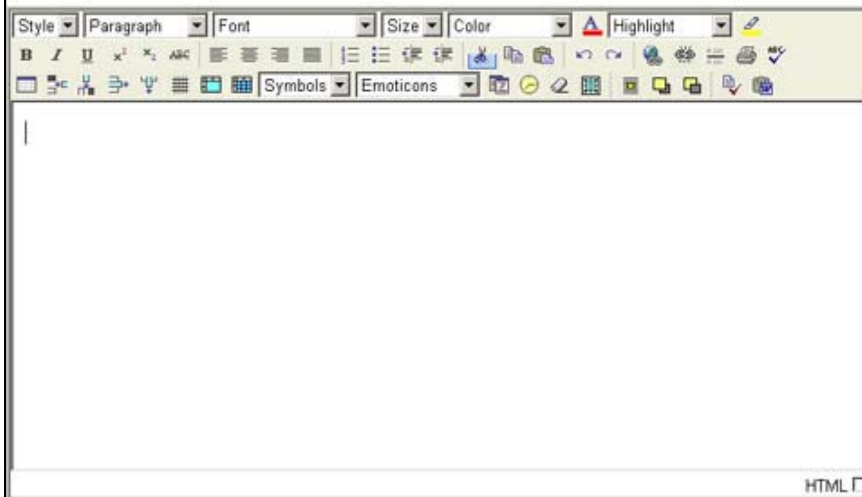
Alignment (left, center, or right):

Left



Heading (optional):

HTML



HTML

Show image gallery >>>

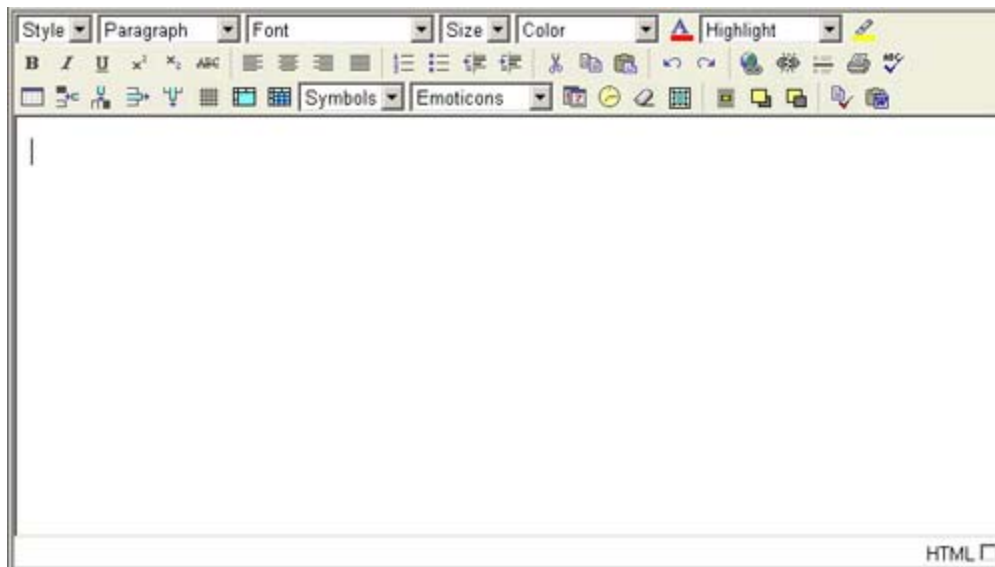
Check here if you want to show images chosen from the following lists as thumbnails:

Image file	Row	Column	Caption
<-----Select an Image File----->	1	1	
<-----Select an Image File----->	1	1	
<-----Select an Image File----->	1	1	
<-----Select an Image File----->	1	1	
<-----Select an Image File----->	1	1	
<-----Select an Image File----->	1	1	

>submit

Within the editor you can define paragraphs even further by using the sequence number and heading. An important note in instruction development: Try to break the module into small easy to digest chunks rather than having multiple sequences.

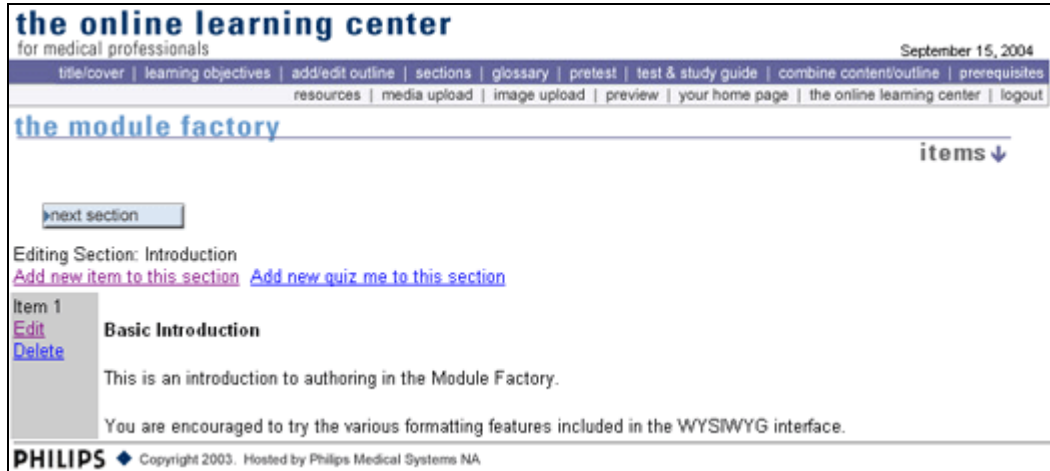
1. If you have multiple sequences you can rearrange the sequences based on the sequence number. For instance, you have completed entering your text for the first paragraph and you decide that there should have been a paragraph before that. All you need to do is renumber the sequences so that the previous sequence is number 2 and the new sequence is number 1. This makes editing your module very simple.
2. You do not need to be proficient in HTML to use this tool. If you have your



document in a text file you can simply copy and paste the text into the text field. The text entry window uses what is known as a WYSIWYG interface. There is a key in the appendix that defines all of the functionality of the special formatting features shown above.

3. Images have never been easier to work with than now. Where you see the button “Show Image Gallery”, click to expand the gallery. This will display every image you uploaded. Simply click, hold and drag the image onto the content box and then release the mouse button to place the image where you want it to appear.
4. Images are also easy to manage subsequent to the text and you can choose where to place them by using the Row and Column function. Note that there is a checkbox that allows you to display the images as thumbnails. This will significantly reduce the time it takes a learner to view the page. The learner will be able to click on the thumbnail and view a larger image in a new window. As was discussed earlier, in the Upload Graphics and Media section, be prudent with your images and the size of images.
5. In the image selection area you will click on the dropdown field that says “-Select an Image File-”. This will open up the Media Library and allow you to select the images you want for this section and sequence. You may reorder the images by

- using the Row and Column function and all images can have a caption assigned by entering the text into the caption field.
6. Media files can also be attached to a sequence. This allows you to add PDF files, movie files, etc to your module.
 7. If you want to use HTML you will see a check box next to HTML. This will take you to a screen where you can add HTML tags.
 8. Once you have completed adding your content click on “Submit”. This will take you to a page where you can see exactly how the page will look to the learner. You will also be given the opportunity to add further sections to this page.



Add Quiz Me

Quiz me's are quite different from the pre-test and test. Quiz me's are meant to test a student's knowledge on a particular section to make sure they understand the material they have just reviewed. They do not count towards the final test nor is there a cumulative score for the Quiz me's. The student will have two attempts to answer the Quiz Me question after that the correct answer will appear.

Click on Add new quiz me to this section.



Like the sections where you arrange the order by selecting a sequence, you can do the same thing with Quiz me's. Select the sequence and enter a number. Sequencing is ordinal so that a number of 1 would be the top, 2 would be second, etc.

The Quiz me section is templated and contains all the elements pre-constructed for ease of adding to your modules. It has a boxed area with header that has been integrated so that it fits in with the color scheme of the site. I will show you the finished Quiz Me at the end of this section.

A Quiz me can be aligned left, center, or right using the drop down menu.

There are four question types, True/False, Multiple Choice, Multiple Response, and Fill in the blank. The difference between a multiple choice question and a multiple response question is a multiple choice question has one answer. A multiple response question can have more than one correct answer. The type of question is selected using the drop down menu.

The screenshot shows a web interface for 'the online learning center' for medical professionals, dated September 16, 2004. The page is titled 'the module factory' and has a 'quiz me' link. The main heading is 'Please fill in the information below to add a "Quiz Me" question to your section. The user will be able to answer this question to help test their knowledge of the material on this page.' Below this, there are several form fields: 'Sequence:' with an input box; 'Alignment (left, center, or right):' with a dropdown menu set to 'Left'; 'Question Type:' with a dropdown menu set to '<-----Select a Question Type----->'; 'Question:' with a large text area and a dropdown menu set to '<-----Select a Question Type----->', which is open to show options: 'Fill In', 'Multiple Choice', 'Multiple Response', and 'True/False'; 'Select an image you want displayed with your question:' with a dropdown menu; and 'Select a media file you want displayed with your question:' with a dropdown menu. At the bottom left is a 'submit' button. The footer contains the Philips logo and copyright information: 'PHILIPS Copyright 2003. Hosted by Philips Medical Systems NA.'

The question is entered into the box. Depending on the question type you choose you will be presented with different screens.

Fill-in the Blank

The Fill in question will give you another form field to fill in for the correct answer. Make sure the answer is absolute! Any deviation from the material presented will create an almost unanswerable question and can cause confusion. For example the question I

use in upcoming quiz types is: “What is the half-life of Tc99m? A better example for a fill-in question would be: “The half-life of Tc99m is _____ hours.” The answer is, of course, 6. Don’t leave anything to interpretation. Those types of questions are better asked using the multiple response, multiple choice, or even True/False format.

the online learning center
for medical professionals

September 16, 2004

title/cover | learning objectives | add/edit outline | sections | glossary | pretest | test & study guide | combine content/outline | prerequisites
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the module factory quiz me ↓

Please fill in the information below to add a "Quiz Me" question to your section. The user will be able to answer this question to help test their knowledge of the material on this page.

The sequence is used to indicate the display order of the items within this section.

Sequence:

Alignment (left, center, or right):

Question Type:

Question:

The right answer is:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

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If you have an image or media file you can select them from the drop down list. The image or media will appear in the finished Quiz Me.

True/False

The True/False question will allow you to select either True or False from a drop down menu. Like the fill-in the blank and the other question types, you can add images and media to the Quiz Me. The question can also be aligned left, center, or right.

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for medical professionals

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the module factory [quiz me ↓](#)

Please fill in the information below to add a "Quiz Me" question to your section. The user will be able to answer this question to help test their knowledge of the material on this page.

The sequence is used to indicate the display order of the items within this section.

Sequence:

Alignment (left, center, or right):

Question Type:

Question:

The right answer is:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

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Multiple Choice and Multiple Response

Both Multiple Choice and Multiple Response questions will ask you to click on the submit button where you will be taken to a second screen to enter in the possible answers. A check box is provided for you to select the correct answer(s). Let's explore each in depth.

Multiple Choice

Multiple choice questions have one correct answer. Typically there are four possible answers that the student can choose from. You can select fewer or more possible answers but the recommended number of possibilities is four.

the online learning center
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September 16, 2004

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the module factory [quiz me](#) ↓

Please fill in the information below to add a "Quiz Me" question to your section. The user will be able to answer this question to help test their knowledge of the material on this page.

The sequence is used to indicate the display order of the items within this section.

Sequence:

Alignment (left, center, or right):

Question Type:

Question:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers for this quiz me question.

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Important! Notice the message just above the submit button: "By clicking the submit button your question will be saved and you will be sent to the next page where you will start entering your answers to this quiz question." Clicking "submit" WILL NOT close out of the question. See the screen below for the sequential screen.

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the module factory [quiz me](#) ↓

Question: TC99m has a half-life of?

Current Answers:
There are currently no answers for this test.

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

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When you enter your possible answer in the box you can select the correct answer by checking the box just below the answer box. The two buttons create two actions. The “submit and add new” button will allow you to add another possible answer to the quiz. The “return” button will take you back to the section page.

Here is a completed answer area for the Multiple Choice response.

The screenshot shows a web interface for 'the online learning center for medical professionals'. The date is September 16, 2004. A navigation bar includes links for 'title/cover', 'learning objectives', 'add/edit outline', 'sections', 'glossary', 'pretest', 'test & study guide', 'combine content/outline', 'prerequisites', 'resources', 'media upload', 'image upload', 'preview', 'your home page', 'the online learning center', and 'logout'. The main heading is 'the module factory' with a 'quiz me' button. The question is 'Question: TC99m has a half-life of?'. Under 'Current Answers:', there are four options: '6 minutes', '6 hours' (marked 'Correct'), '6 days', and '8 hours'. Each option has 'edit' and 'delete' buttons. Below this, it says 'You can enter a new answer below:' with an 'Answer:' label and a text input box. There is a 'Check if correct answer:' checkbox. A note says 'Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.' At the bottom are 'submit & add new' and 'return' buttons. The footer includes the Philips logo and 'Copyright 2003. Hosted by Philips Medical Systems NA'.

Multiple Response

Multiple response questions can have more than one correct answer. This is a departure from the multiple choice question that has one correct answer. Like the multiple choice quiz me you can have as many possible answers as you would like but the typical number of answers is four. Any or all of the responses can be selected as correct. Here are the screens associated with a multiple response quiz me.

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the module factory **quiz me** ↓

Please fill in the information below to add a "Quiz Me" question to your section. The user will be able to answer this question to help test their knowledge of the material on this page.

The sequence is used to indicate the display order of the items within this section.

Sequence:

Alignment (left, center, or right):

Question Type:

Question:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers for this quiz me question.

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Important! Notice the message just above the submit button: "By clicking the submit button your question will be saved and you will be sent to the next page where you will start entering your answers to this quiz question." Clicking "submit" WILL NOT close out of the question. See the screen below for the sequential screen.

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the module factory **quiz me** ↓

Question: TC99m has a half-life of?

Current Answers:
There are currently no answers for this test.

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

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When you enter your possible answer in the box you can select the correct answer by checking the box just below the answer box. The two buttons create two actions. The “submit and add new” button will allow you to add another possible answer to the quiz. The “return” button will take you back to the section page.

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the module factory quiz me ↓

Question: TC99m has a half-life of?

Current Answers:

6 minutes	<input type="checkbox"/>	<input type="button" value="edit"/>	<input type="button" value="delete"/>
6 hours Correct	<input checked="" type="checkbox"/>	<input type="button" value="edit"/>	<input type="button" value="delete"/>
360 minutes Correct	<input checked="" type="checkbox"/>	<input type="button" value="edit"/>	<input type="button" value="delete"/>
21600 seconds Correct	<input checked="" type="checkbox"/>	<input type="button" value="edit"/>	<input type="button" value="delete"/>

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

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Here are completed multiple choice and multiple response quiz me questions with possible answers.

Quiz Me ▶▶

TC99m has a half-life of?
(Note: You will be given 2 tries to answer this question, then the answer will be provided.)

- 6 minutes
- 6 hours
- 6 days
- 8 hours

Quiz Me ▶▶

TC99m has a half-life of?
(Note: You will be given 2 tries to answer this question, then the answer will be provided.)

- 6 minutes
- 6 hours
- 360 minutes
- 21600 seconds

You also have the capability of adding either a graphic or media file to augment your quiz question. These can be selected from a drop down menu on the main page of the quiz me edit area.

Quiz me questions can be modified at anytime up through publication of your module.

Threaded Discussion

The Threaded Discussion is a feature that allows the author of modules to communicate with students taking the course being authored or even allow students to communicate with other students.

To set up a Threaded Discussion go to the Section area. You will see “Add Discussion Group to This Module”. Click on that link to initiate the process.

You will be brought to this screen. The name of the Module is already filled into the New Group field. You can change this but I would not recommend it because this will make it easier for you to track the activity. The Private Description will also be entered as will the Author’s e-mail address in the Moderate E-mail field. You will need to fill in the Public Description. This should relate the purpose of the Discussion Group. Make sure you click in the box “Notify Moderator on each post”. This will send an email to you notifying you that a message has been posted to your Discussion Group.

After completing the form above you will be brought to this screen. Simply click here to view the Discussion Group you created.

If you would like to add a message to the site welcoming people or setting ground rules you can do that by clicking on the hyperlink reading “Click here to post a question, comment or start a thread”.

You will be brought to this screen which looks like an e-mail screen and that is essentially what it is. The Sender Name and E-mail will automatically be filled in. The sender will fill in the Subject and the Message area. Once the message is submitted an auto e-mail will be sent to the Author advising them that a message has been posted to their message area and which module was posted to.

As an author you have the ability to monitor the Discussion Thread through the Author Tools. You will see the Discuss icon at the far right of the Module title. Simply click on the Discuss icon and it will launch the Discussion window. There you will be able to monitor the Discussion, post responses and encourage interaction with those learners that desire it.

The site manager can monitor, delete messages and even discontinue a Discussion Thread.

Link a Book to This Module

The Online Learning Center is linked to Amazon for book purchases. Books can be added to a module. This can be very beneficial for students wanting more information on a particular topic.

Adding a book to a module is done by clicking on the Link a book to this module. This will bring you to a screen where you will enter in an ASIN number. ASIN is an acronym for Amazon.com Standard Identification Number. This number is easily found by going to the Amazon.com website and copying and pasting the ID number into the field. This will create a direct link to the Amazon.com website and that particular book.

Sections: Edit

If you have exited the Module Factory and then want to come back and begin work on a section that you left off on or make changes to an existing section, by default you will be brought to this page. Simply click on the edit button next to the section you want to begin editing. The steps are identical to the previous topic.

Pretest

Pretesting is an excellent way to find out how much (or little) the student knows for both you and them. The pretest is broken up into two styles of testing, competency and pre-assessment. There are also two options after deciding on competency or pretest: “User must still review course and take Post Assessment Test” or “User will be taken directly to certificate”.

Competency testing is used when you want a user to take the test as a mandatory part of the module. The student will need to complete the competency test prior to being given access to the material. You can also determine what path the student will be taken through with this type of test. You can mandate that the student complete the competency test and then have them either proceed to the course material or if they will be given access to a certificate if they successfully complete the test. If the module is accredited by ANY of the accrediting agencies, the student MAY NOT skip reviewing the course material under ANY circumstance! All material must be reviewed in order to receive credit for successful completion

The pre-assessment test will be a link on the existing module homepage and the user has the option to take it or not take it. This type of test is more for the student’s benefit than for the benefit of the instructor. It will help the student understand what areas they are weak in and allow them to concentrate on those areas.

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the module factory pretest ↓

If you would like to create a Pretest/Competency Exam for your module, you must first decide which type of test you would like to display to the learner. The main difference between the Competency Exam and the Pretest is that the Competency Exam has to be taken in order to see the course material, whereas the Pretest will be a link on the existing module homepage and the user has the option to take it or not take it. Once you decide which type best fits your module, if any, you must then decide whether or not you want the Pretest/Competency Exam to count as the user's Post Assessment Test score or if they should have to take the Post Assessment Test regardless of their Pretest/Competency Exam score.

Please select one:

Competency Exam
 Pre-Assessment Test

If the user passes the Pretest/Competency Exam:

User must still review course and take Post Assessment Test
 User will be taken directly to certificate

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The first option is Competency Exam. When you select this option you require your student to complete test prior to moving on. Access to the module is prevented until the test is taken. You can either send them to the course material or their certificate if they complete the test successfully. **Again note the option of bypassing the content is NOT ALLOWED by our accrediting agencies. The user MUST complete all the material prior to receiving their certificate.** If the student fails the test they are required to take the module and the post assessment test and the navigation is presented to them to lead them into the material.

Use of this testing option could be implemented by the sales, marketing, or service divisions of Philips Medical Systems and could also be implemented in education.

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the module factory pretest ↓

If you would like to create a Pretest/Competency Exam for your module, you must first decide which type of test you would like to display to the learner. The main difference between the Competency Exam and the Pretest is that the Competency Exam has to be taken in order to see the course material, whereas the Pretest will be a link on the existing module homepage and the user has the option to take it or not take it. Once you decide which type best fits your module, if any, you must then decide whether or not you want the Pretest/Competency Exam to count as the user's Post Assessment Test score or if they should have to take the Post Assessment Test regardless of their Pretest/Competency Exam score.

Please select one:

Competency Exam
 Pre-Assessment Test

If the user passes the Pretest/Competency Exam:

User must still review course and take Post Assessment Test
 User will be taken directly to certificate

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The second option is Pre-Assessment Test. When you select this option you allow the user to decide whether they want to try the test prior to studying the material. Access to the course content is provided through the standard navigation. You may ask the student to take the test as a way of gauging their knowledge prior to moving into the content but there is no way to mandate that they do. **Again note the option of bypassing the content is NOT ALLOWED by our accrediting agencies. The user MUST complete all the material prior to receiving their certificate.** Regardless of passing or failing the pretest the student is required to read the content of the module.

The screenshot shows the 'the online learning center' for medical professionals. The date is September 22, 2004. The navigation bar includes links for title/cover, learning objectives, add/edit outline, sections, glossary, pretest, test & study guide, combine content/outline, prerequisites, resources, media upload, image upload, preview, your home page, the online learning center, and logout. The main heading is 'the module factory' with a 'pretest' dropdown menu. The text explains the difference between a Competency Exam and a Pretest. Below this, there are two sections: 'Please select one:' with radio buttons for 'Competency Exam' and 'Pre-Assessment Test' (which is selected), and 'If the user passes the Pretest/Competency Exam:' with radio buttons for 'User must still review course and take Post Assessment Test' (selected) and 'User will be taken directly to certificate'. A 'submit' button is at the bottom left. The footer includes the Philips logo and copyright information: 'Copyright 2003. Hosted by Philips Medical Systems NA'.

For the purposes of this tutorial we will be using the “Pre-assessment Test” and the “User must still review course and take Post Assessment Test”. After clicking the submit button you will be brought to the following screen where you have three options:

The screenshot shows the 'the online learning center' for medical professionals. The date is September 22, 2004. The navigation bar is the same as in the previous screenshot. The main heading is 'the module factory' with a 'pretest' dropdown menu. The text states: 'You have chosen **Pre-Assessment Test** as the type of pretest you would like for this module. Listed below are the questions assigned to this test. You may also add a new question at anytime by clicking the "New Question" button.' Below this text are three buttons: 'new question', 'associate questions to this test', and 'delete test'. A message below the buttons says: 'There are currently no test questions available to view or edit.' The footer includes the Philips logo and copyright information: 'Copyright 2003. Hosted by Philips Medical Systems NA'.

“New question”, “Associate questions to this test”, and “Delete test”. Because we haven’t done anything yet we will need to add a new question to the module. Click on the “new question” button and you will be brought to the next screen.

Like the Quiz Me and Test areas you have access to four different types of questions, True/False, Multiple Choice, Multiple Response, and Fill in the blank. The difference between a multiple choice question and a multiple response question is a multiple choice question has one answer. A multiple response question can have more than one correct answer. The type of question is selected using the drop down menu.

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the module factory pretest ↓

module creation
Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type: <-----Select a Question Type----->
Associated Topic: <-----S----->
Question:
Display Sequence:
Select an image you want displayed with your question:
Select a media file you want displayed with your question:
Study Text:

[submit](#)

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Unlike the Quiz Me questions you need to associate a topic with the question. This is so that the user can receive more information about the question and answer if they get the answer incorrect. The student can use this information to learn more about the topic. Unlike the post test, you can use the correct answer and rationale for the answer. In the post test you are prohibited from providing the correct answer in the study text area by the accrediting agencies because if enough questions are answered incorrectly the student will be required to take the test again. By providing the answer you are enabling the student to automatically pass the test the second time.

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the module factory pretest ↓

module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type: <-----Select a Question Type----->
Associated Topic: <-----Select a topic----->
Question: <-----Select a topic----->
 <-----Select a topic----->
 module creation
 --New Topic--
Display Sequence:
Select an image you want displayed with your question:
Select a media file you want displayed with your question:
Study Text:

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The display sequence is similar to the sections. You can determine what order the questions appear in by changing the value in the display sequence. The numbering sequence follows the increasing value format where 1 is displayed first.

Images and media may also be placed in a question to help demonstrate a principle or other types of information.

Fill-in the Blank

The Fill in question will give you another form field to fill in for the correct answer. Make sure the answer is absolute! Any deviation from the material presented will create an almost unanswerable question and can cause confusion. For example the question I use in the upcoming quiz types is: “_____ means braking radiation and is retained from the original German to describe the radiation which is emitted when

electrons are decelerated or “braked” when they are fired at a metal target.” The answer is, of course, Bremsstrahlung. Don’t leave anything to interpretation. Those types of questions are better asked using the multiple response, multiple choice, or even True/False format.

The screenshot shows a web interface for 'the online learning center for medical professionals' dated September 22, 2004. The main heading is 'the module factory' with a 'pretest ↓' button. Under 'module creation', a note states: 'Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.' A 'back to question list' button is present. The form includes: 'Question Type:' set to 'Fill in'; 'Associated Topic:' set to 'module creation'; 'Question:' text area containing: '_____ means "braking radiation" and is retained from the original German to describe the radiation which is emitted when electrons are decelerated or "braked" when they are fired at a metal target.'; 'Display Sequence:' empty; 'The right answer is:' text box containing 'Bremsstrahlung'; 'Select an image you want displayed with your question:' empty; 'Select a media file you want displayed with your question:' empty; 'Study Text:' text area containing: '"Bremsstrahlung" means "braking radiation" and is retained from the original German to describe the radiation which is emitted when electrons are decelerated or "braked" when they are fired at a metal target. Accelerated charges give off electromagnetic radiation, and when the energy of the bombarding electrons is high enough, that radiation is in the x-ray region of the electromagnetic spectrum.'; and a 'submit' button. The footer includes the Philips logo and copyright information: 'PHILIPS Copyright 2003. Hosted by Philips Medical Systems NA'.

Multiple Choice and Multiple Response

Both Multiple Choice and Multiple Response questions will ask you to click on the submit button where you will be taken to a second screen to enter in the possible answers. A check box is provided for you to select the correct answer(s). Let’s explore each in depth.

Multiple Choice

Multiple choice questions have one correct answer. Typically there are four possible answers that the student can choose from. You can select fewer or more possible answers but the recommended number of possibilities is four.

The screenshot shows a web interface for 'the online learning center for medical professionals'. The page is titled 'the module factory' and includes a 'pretest' dropdown menu. Under the 'module creation' section, there is a note: 'Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.' A 'back to question list' button is located below the note. The form contains several fields: 'Question Type' is a dropdown menu set to 'Multiple Choice'; 'Associated Topic' is a dropdown menu with the text '<-----Select a topic----->'; 'Question:' is a large text area; 'Display Sequence:' is a small text input field; 'Select an image you want displayed with your question:' is a dropdown menu; 'Select a media file you want displayed with your question:' is another dropdown menu; and 'Study Text:' is a large text area. At the bottom, there is a 'submit' button and a message: 'By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers.' The footer includes the Philips logo and copyright information: 'PHILIPS Copyright 2003. Hosted by Philips Medical Systems NA'.

Important! Notice the message just above the submit button: “By clicking the submit button your question will be saved and you will be sent to the next page where you will start entering your answers to this quiz question.” Clicking “submit” WILL NOT close out of the question. See the screen below for the sequential screen.

Here is the completed question area with all the fields filled out.

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the module factory pretest ↓

module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type:

Associated Topic:

Question:

Display Sequence:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers.

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When you enter your possible answer in the box you can select the correct answer by checking the box just below the answer box. The two buttons create two actions. The “submit and add new” button will allow you to add another possible answer to the quiz. The “return” button will take you back to the pretest main page.

Here is a completed answer area for the Multiple Choice response.

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the module factory pretest ↓

Question: There are 92 naturally occurring elements. What is the position of hydrogen in the periodic table?

Current Answers:

1 Correct	edit	delete
24	edit	delete
75	edit	delete
92	edit	delete

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

[submit & add new](#) [return](#)

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Multiple Response

Multiple response questions can have more than one correct answer. This is a departure from the multiple choice question that has one correct answer. Like the multiple choice quiz me you can have as many possible answers as you would like but the typical number of answers is four. Any or all of the responses can be selected as correct. Here are the screens associated with a multiple response question.

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the module factory pretest ↓

module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type:

Associated Topic:

Question:

Display Sequence:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers.

[submit](#)

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Important! Notice the message just above the submit button: “By clicking the submit button your question will be saved and you will be sent to the next page where you will start entering your answers to this quiz question.” Clicking “submit” WILL NOT close out of the question. See the screen below for the sequential screen.

Here is an example a completed multiple response question area.

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the module factory pretest ↓

Question: Three ways to reduce radiation exposure for medical personnel are:

Current Answers:

time Correct	edit	delete
distance Correct	edit	delete
wearing radiation detection badges	edit	delete
shielding Correct	edit	delete

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

[submit & add new](#) [return](#)

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True/False

The True/False question will allow you to select either True or False from a drop down menu. Like the fill-in the blank and the other question types, you can add images and media to the test question.

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the module factory pretest ↓

module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type:

Associated Topic:

Question:

Display Sequence:

The right answer is:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

[submit](#)

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After completing your test, you will be brought back to the list of questions. Beside each question you will have between two and three choices depending on the type of question: edit question, edit answers, or delete. The reason you are not given the option to edit your answer in the fill-in the blank or true/false question is that the answer is defined in the question itself so you can modify the answer there.

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the module factory pretest ↓

You have chosen **Pre-Assessment Test** as the type of pretest you would like for this module. Listed below are the questions assigned to this test. You may also add a new question at anytime by clicking the "New Question" button.

Question

1) _____ means "braking radiation" and is retained from the original German to describe the radiation which is emitted when electrons are decelerated or "braked" when they are fired at a metal target. (Fill In)

2) There are 92 naturally occurring elements. What is the position of hydrogen in the periodic table? (Multiple Choice)

3) Three ways to reduce radiation exposure for medical personnel are: (Multiple Response)

4) Ultraviolet Radiation has no effect on the eye because of it's viscious nature. (True/False)

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After completing the test you also have the option to change the order of your questions by clicking on "associate questions to this test". You will be brought to the following screen. Click on the number and modify it to meet your requirement. You can also elect to omit a question by clicking on the check box. By deselecting a box, the question will be hidden until you decide to make it visible.

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the module factory pretest ↓

The following are all the questions that have been created for this module. Any question box checked off means this question has been assigned to this test. To add any questions to this test, simply check the box, and then type in the display sequence.

1 _____ radiation which is emitted when electrons are decelerated or "braked" when they are fired at a metal target. (Fill In)

2 There are 92 naturally occurring elements. What is the position of hydrogen in the periodic table? (Multiple Choice)

3 Three ways to reduce radiation exposure for medical personnel are: (Multiple Response)

4 Ultraviolet Radiation has no effect on the eye because of it's viscious nature. (True/False)

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By clicking on submit you will be taken back to the main pretest page as shown.

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the module factory pretest ↓

You have chosen **Pre-Assessment Test** as the type of pretest you would like for this module. Listed below are the questions assigned to this test. You may also add a new question at anytime by clicking the "New Question" button.

Question

1) _____ means "braking radiation" and is retained from the original German to describe the radiation which is emitted when electrons are decelerated or "braked" when they are fired at a metal target. (Fill in)

2) There are 92 naturally occurring elements. What is the position of hydrogen in the periodic table? (Multiple Choice)

3) Three ways to reduce radiation exposure for medical personnel are: (Multiple Response)

4) Ultraviolet Radiation has no effect on the eye because of it's viscious nature. (True/False)

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By selecting the "delete test" button, you will be given the option to delete the pretest and questions or simply delete the pretest. While these sound identical, they are quite different.

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the module factory pretest ↓

Please select one of the following options for deleting this pretest:

Delete pretest and Questions
 Delete pretest only

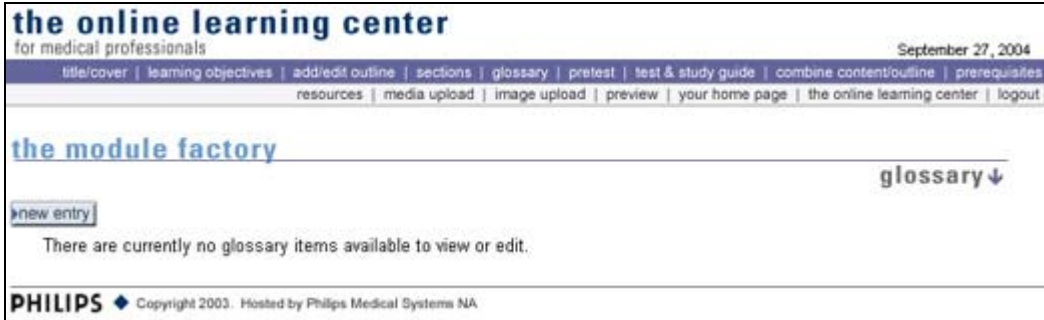
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Selecting the "delete pretest and questions", you will be deleting everything! Only do this if you don't want save any of the information entered in the pretest. Selecting "delete pretest only" will give you the opportunity to reinstate the pretest again at a later date using the questions already entered in the pretest.

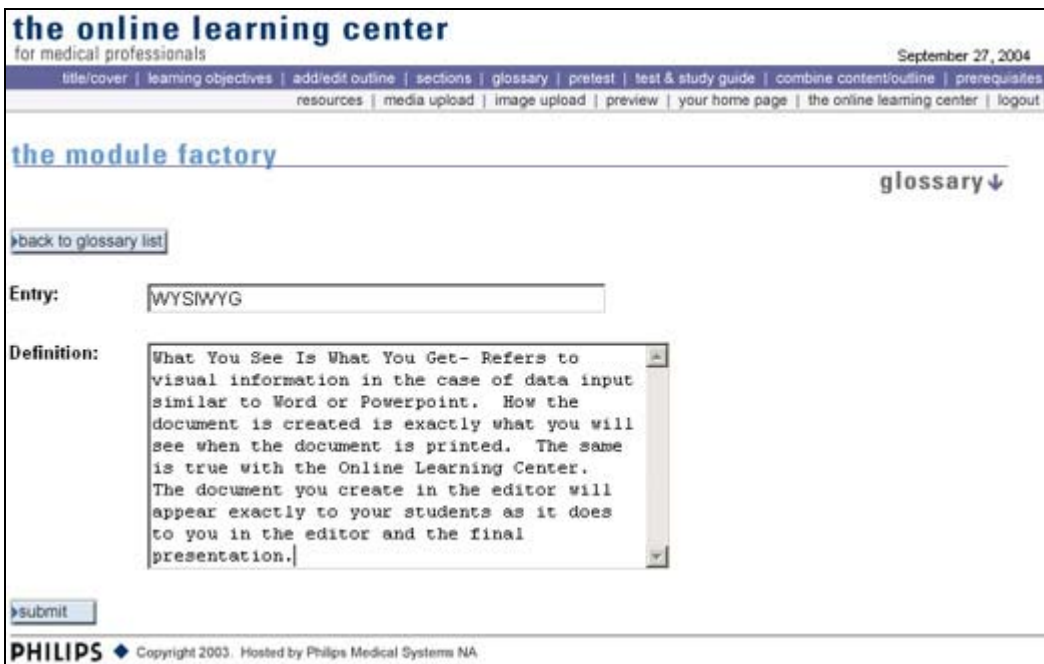
Glossary

With few exceptions, your module should contain a glossary of commonly used terms. Working on the glossary is really no different than adding content to the main module sections. When you first start on your module, it will appear empty.

To add content, click on “New Entry” as seen in the image below.



You will be brought to the following screen where you can enter the term and the definition. In the case of the example shown here I use the every popular WYSIWYG term with a general definition of what it means.



After completing the entry and definition click on the “submit” button. That will bring you back to the main page of the glossary where you can create additional entries. The main page view will show you all the entries you have made so that you can keep track of your entries. The system is designed to allow multiple entries.

The Glossary editor will automatically alphabetize the data for you in ascending order and you can “Edit” or “Delete” any of the glossary items at any time by going to the main glossary page.

Test & Study Guide

Before we get into post test creation we should probably touch on expectations of accrediting agencies. The best document available for this is the Request For Approval document released by the ASRT. Copies of the RFA package can be downloaded at the sites: <http://www.asrt.org/content/CESponsors/RequestforApprovalPacketRFA/rfa.aspx> The section “How To Design Post-tests” starts on page 30. There is no way to do justice to the excellent work they have put into this document so I am just going to hit the highlights. If you are seeking accreditation by an agency other than the ASRT you will want to check with them to determine if other testing guidelines are appropriate. Authors not seeking approval/accreditation may use the full scope of the testing engine.

Number of Questions

The number of questions must be proportionate to the amount of content in the module. The test must cover the content and objective of the course. When seeking accreditation the agency will determine the “Credit Hours” a module may receive based on the amount of time it will take the average student to complete the specific module. In other words, a 1 CE module should take a total of 1 hour to study and complete the module. If you believe your course exceeds the one hour limit then you can apply for additional credit but you will need to include more questions. The chart shown here will give you a basic guideline.

Credits applied for	Number of test questions required
1 CE	20 question post-test
1.5 CE's	25 question post-test
2 CE's	30 question post-test
Courses in excess of the CE's listed here should have longer tests with an additional 5 questions per half credit.	

Question Types

Only two types of questions may be used for continuing education post-tests. These include multiple choice and true/false questions. One true/false question for every 10 questions is considered a good ratio.

Once again I would highly recommend that you read the ASRT Request for Approval document. You will gain a greater understanding of good and bad questions as well as exceptions and requirements for handling those exceptions. You do not need to be a member of the ASRT to download this document. Here is the link again for your convenience. It will also be placed in the reference and links section.

<http://www.asrt.org/content/CESponsors/RequestforApprovalPacketRFA/rfa.aspx>

Test & Study Guide

The “Test & Study Guide” section is very similar to the rest of Module Creation System and particularly the “Quiz Me and Pretest” sections. The number of test questions will vary depending on the length of your course, please see the previous section for more information.

New requirements are being instituted by the governing bodies of the accrediting agencies. The Online Learning Center was designed to allow the user to test an infinite number of times or until they passed the test. That will no longer be the case for most post tests. Depending on the accrediting agency the user will be given a maximum of 3 test opportunities per module and in some cases 2. Any user failing the test will be given the opportunity to repurchase the module and test again.

Two other important features are also being implemented and are included here. They include mandatory prerequisites and the inability to “print” the test.

The purpose of the prerequisites is to mandate that specific sections must be read prior to reaching the test. In most cases this will include the objectives and all sections of the outline. In some cases you may have optional sections that are not required as long as the sections are not included in the amount of CE being requested and is not part of the requirements of the course. For example, additional reading references that a student may wish to visit, additional examples of material already covered in the main course that

are used for reinforcement and not as primary information. You often see this in some text books where a specific fracture is shown and then they will display the same fracture from different patients.

Now, let's move into the post-test. The first screen you will see is the one that allows you to determine the maximum number of times the student can take the test. You will be able to select unlimited or limit to a specific number of times. **NOTE: CE accredited courses must have a maximum of 3 tries and in some cases 2. Be sure to click the submit button prior to clicking on the word [here](#) in Step 2.**

here.' The footer contains the Philips logo and text: 'PHILIPS Copyright 2003. Hosted by Philips Medical Systems NA'."/>

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Directions:

Step 1. Before creating your test, enter the maximum number of times a learner can attempt to pass the test for this module.

The default is "unlimited" for internal or non-CEU courses, and 3 for CEU courses. Be sure to click "submit" before continuing.

Maximum number of learner test attempts for " module creation":

Unlimited

Limited to tries.

Step 2. Continue to create your test by clicking [here](#).

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You will notice the default is set to unlimited. This choice may be used for internal or non-CE courses.

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Directions:

Step 1. Before creating your test, enter the maximum number of times a learner can attempt to pass the test for this module.

The default is "unlimited" for internal or non-CEU courses, and 3 for CEU courses. Be sure to click "submit" before continuing.

Maximum number of learner test attempts for " module creation":

Unlimited
 Limited to tries.

Step 2. Continue to create your test by clicking [here](#).

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After completing Step 2 you will be brought to the main test screen where you can choose the type of test you want to provide to your student.

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the module factory

test & study guide ↓

Directions: There are several different types of tests that you can create for your module. You can create a set number of tests, or just one test. Please click on the hyperlinks below for a more detailed description of that type of test. Below are your test options:

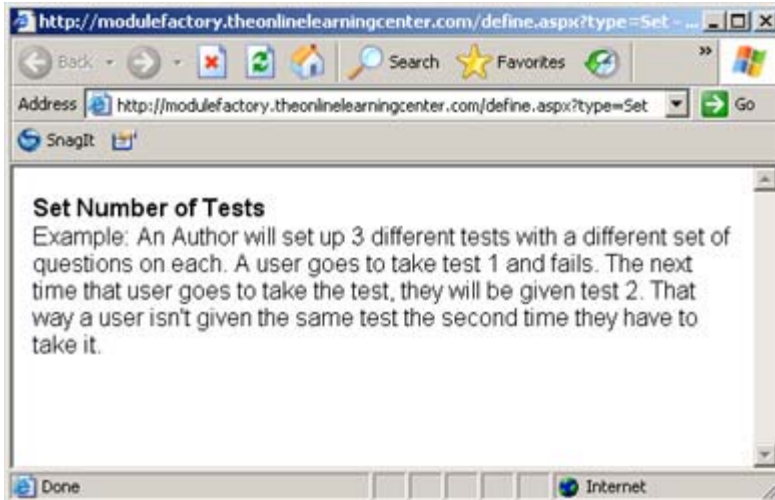
1. [Set Number of Tests](#)
2. [Standard Test](#)
3. [Test Bank: Randomization of Questions and Response Answers](#)

Please select one:

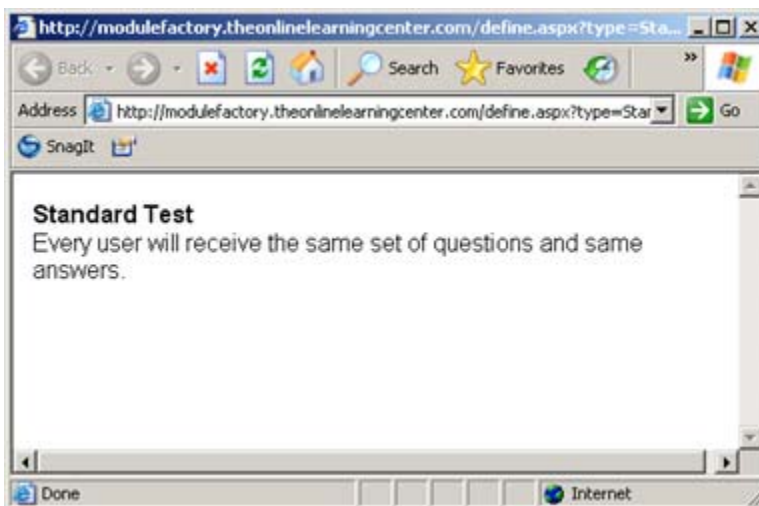
Set Number of Tests
 Standard Test
 Test Bank: Randomization of Questions and Response Answers


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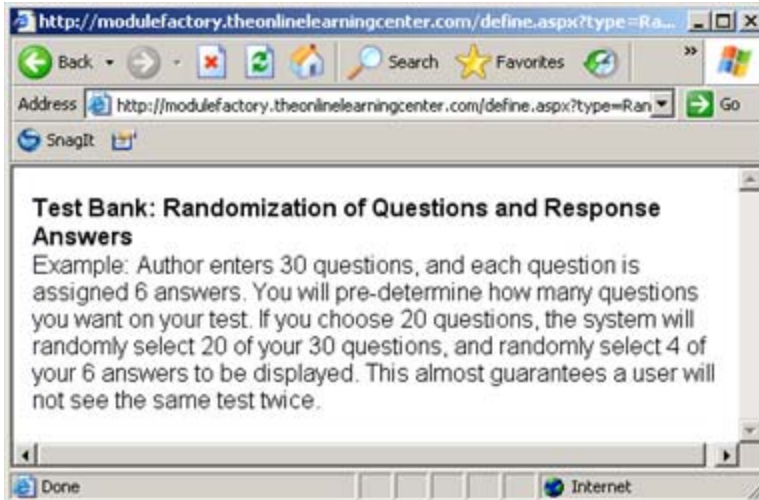
The first type of test is a "Set Number of Tests". A full description of this type of test is displayed in the screen capture shown here.



The second type of test is the “Standard Test”. With this test the student will be given the same test over and over again. There won’t be any variation of the test.



The third type of test is my personal favorite and is called the “Test Bank”. With this type of test the questions and answers won’t appear in the same order, they will be randomized. This is an excellent way of determining whether a student really understands the material. If you want to try it you can click on the preview button after entering the test. After the test is displayed, click on the refresh button  , in Internet Explorer, and you will receive the same test but with all the questions and answers randomized again. In addition to randomizing, you are given the opportunity to enter the number of questions a student will see at one time. For instance, you can enter the number 20 for the questions displayed. If you enter in more than 20 questions into the test bank, the database will display 20 of the x-number of questions in random order.



After selecting the type of test you want to provide click on “submit”. This will take you to the next screen.

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the module factory **test & study guide** ↓

Directions: There are several different types of tests that you can create for your module. You can create a set number of tests, or just one test. Please click on the hyperlinks below for a more detailed description of that type of test. Below are your test options:

- [1. Set Number of Tests](#)
- [2. Standard Test](#)
- [3. Test Bank: Randomization of Questions and Response Answers](#)

Please select one:

Set Number of Tests
 Standard Test
 Test Bank: Randomization of Questions and Response Answers

How many questions do you want on the test?

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On this screen you will choose between adding a “new question” or “delete test”. Because we have not entered a test we need to click on “new question”,

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the module factory test & study guide ↓

You have chosen **Test Bank: Randomization of Questions and Response Answers** as the type of test you would like for this module. Listed below are the questions assigned to this test. You may also add a new question at anytime by clicking the "New Question" button.

There are currently no test questions available to view or edit.

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The post-test creation is no different than the quiz me or pretest. You have the same selections as you did there. **NOTE: The one thing to remember is if you are dealing with CE you are limited to Multiple Choice and True/False questions. Be sure to read the Request for Accreditation document from the ASRT to understand their requirements. If you are dealing with other accrediting agencies be sure you understand their requirements.**

Because there are non-CE content providers I am including fill-in the blank and multiple response questions too for their benefit.

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module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type: <-----Select a Question Type----->
Associated Topic: <-----Select a Question Type----->
Question: <-----Select a Question Type----->
 Fill In
 Multiple Choice
 Multiple Response
 True/False

Select an image you want displayed with your question:
Select a media file you want displayed with your question:
Study Text:

[submit](#)

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After selecting the “Question Type” you will need to select the “Associated Topic”. The “Associated Topic” relates to the module content and more specifically the outline and sections. In other words, what part of the module does the question come from? By using this association you can direct the student to the correct section for further review.

Like all the questions, you may use either an image or media if you would like.

The “Study Text” is also important for the student because it allows them to go back and review the material they missed. **NOTE: The completed test is not displayed until AFTER they have successfully passed the post-test and the results CANNOT be printed. SPECIAL NOTE: It must not be used to give the correct answer.**

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module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type: <-----Select a Question Type----->
Associated Topic: <-----Select a topic----->
Question: <-----Select a topic----->
 <-----Select a topic----->
 module creation
 ---New Topic---

Select an image you want displayed with your question:
Select a media file you want displayed with your question:
Study Text:

[submit](#)

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Fill-in the Blank

For the advantage of those who can use fill-in the blank questions, I have included and example here. The Fill in question will give you another form field to fill in for the correct answer. Make sure the answer is absolute! Any deviation from the material presented will create an almost unanswerable question and can cause confusion. For example the question I use in the upcoming quiz types is: “The _____ is the synchronous learning site that can be used in conjunction with the Online Learning Center” The answer is, of course, SMART Center. Don’t leave anything to interpretation. Those types of questions are better asked using the multiple response, multiple choice, or even True/False format.

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module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

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Question Type:

Associated Topic:

Question:

The right answer is:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

[submit](#)

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Multiple Choice and Multiple Response

Both Multiple Choice and Multiple Response questions will ask you to click on the submit button where you will be taken to a second screen to enter in the possible answers. A check box is provided for you to select the correct answer(s). Let's explore each in depth.

Multiple Choice

Multiple choice questions have one correct answer. Typically there are four possible answers that the student can choose from. You can select fewer or more possible answers but the recommended number of possibilities is four.

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Question Type:

Associated Topic:

Question:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers.

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Important! Notice the message just above the submit button: “By clicking the submit button your question will be saved and you will be sent to the next page where you will start entering your answers to this quiz question.” Clicking “submit” WILL NOT close out of the question. See the screen below for the sequential screen.

Here is the completed question area with all the fields filled out.

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Question: A section can have multiple sequences. What is a section sequence?

Current Answers:

A sentence	edit	delete
A module	edit	delete
A paragraph Correct	edit	delete
A chapter	edit	delete

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

[submit & add new](#) [return](#)

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Multiple Response

Like the fill-in the blank question, this type of question cannot be used for CE courses. Multiple response questions can have more than one correct answer. This is a departure from the multiple choice question that has one correct answer. Like the multiple choice quiz me you can have as many possible answers as you would like but the typical number of answers is four. Any or all of the responses can be selected as correct. Here are the screens associated with a multiple response question.

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Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

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Question Type:

Associated Topic:

Question:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

By hitting submit your question will be saved and you will be sent to the next page where you will start entering your answers.

[submit](#)

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Important! Notice the message just above the submit button: “By clicking the submit button your question will be saved and you will be sent to the next page where you will start entering your answers to this quiz question.” Clicking “submit” WILL NOT close out of the question. See the screen below for the sequential screen.

Here is the completed question area with all the fields filled out.

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Question: Which of the following statements are TRUE?

Current Answers:

Pretesting has includes competency and preassessment testing. **Correct** [edit](#) [delete](#)

Competency tests allow the user to go directly to the course material without taking the test. [edit](#) [delete](#)

Competency tests are allowed by accrediting agencies and allow the student to "test-out" of the module if they pass the test. [edit](#) [delete](#)

Pretesting is valuable to the student because it assesses their knowledge of the material prior to reading the material and enables them to concentrate on areas of weakness. **Correct** [edit](#) [delete](#)

You can enter a new answer below:

Answer:

Check if correct answer:

Click "Submit & Add New" to add another answer to this question, otherwise click "Submit & Return" to return to test homepage.

[submit & add new](#) [return](#)

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True/False

The True/False question will allow you to select either True or False from a drop down menu. Like the fill-in the blank and the other question types, you can add images and media to the test question.

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module creation

Note: You should define all topics for this module before defining questions, as each question must be associated with a topic for study.

[back to question list](#)

Question Type:

Associated Topic:

Question:

The right answer is:

Select an image you want displayed with your question:

Select a media file you want displayed with your question:

Study Text:

[submit](#)

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After completing your test, you will be brought back to the list of questions. Beside each question you will have between two and three choices depending on the type of question: edit question, edit answers, or delete. The reason you are not given the option to edit your answer in the fill-in the blank or true/false question is that the answer is defined in the question itself so you can modify the answer there.

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You have chosen **Test Bank: Randomization of Questions and Response Answers** as the type of test you would like for this module. Listed below are the questions assigned to this test. You may also add a new question at anytime by clicking the "New Question" button.

Question

The _____ is the synchronous learning site that can be used in conjunction with the Online Learning Center. (Fill in)

Which of the following statements are TRUE? (Multiple Response)

Prerequisites require that students complete specific sections prior to seeing the post test. (True/False)

A section can have multiple sequences. What is a section sequence? (Multiple Choice)

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By selecting the “delete test” button, you will be given the option to delete the pretest and questions or simply delete the pretest. While these sound identical, they are quite different.

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Please select one of the following options for deleting this test:

Delete Test and Questions
 Delete Test only

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Selecting the “delete pretest and questions”, you will be deleting everything! Only do this if you don’t want save any of the information entered in the pretest. Selecting “delete pretest only” will give you the opportunity to reinstate the pretest again at a later date using the questions already entered in the pretest.

Combine Content & Outline

The Combine Content/Outline section gives you the ability to define where your content appears in the final course module. You will see, on the left side, the different

sections/sequences you created in the Add/Edit Content area. We created the Module Factory this way so that you can decide where the content really goes. As with any course, things change on a pretty routine basis when creating a module whether it's an afterthought or new information or even obsolete information. By having the flexibility to change the order of information you can manage where the content appears.

The concept of the Combine Content/Outline Editor is pretty straightforward. You simply associate the course content from the right (pink) side with the course outline on the left (blue) side. You can even place content in the major topics.

In the example to the right you will select the "Relationship of the Internet to W3" from the Course Content area and then click in the Course Outline area where you want the content to appear. In this case it is the "Relationship of the Internet to W3" subtopic under "The Internet and the World Wide Web" topic. Proceed through all of your Course Content the same way until all the desired content is in the Course Outline. You can disassociate content if you make a mistake by clicking on the arrow next to the content. This will place it back in the pink Course Content area so it can be associated to another topic or subtopic. Note: If content is not associated with an outline topic or subtopic it will not appear in the published module.

Your completed Course Structure Editor page should look similar to the example shown here.

Prerequisites

Prerequisites – this area enables you to mandate that specific pages be reviewed before the student is given access to the test. You have the ability to select all the pages at one time or manually select individual sections. Why the manual selection? You might have some supporting material that while interesting is not part of the mandatory content such as a list of web sites that can be reviewed or some additional images that support a specific section but was covered adequately in that section. There is another option in this area that mandates a student spend a specific amount of time

Publication

Job well done! You are now ready to move to the final process of the module creation process which is requesting publication of your module. Before you do that though, it is a good idea to go through a checklist and see if there are any modifications you need to make prior to requesting publication.

Final Checklist:

1. Preview your module as it will appear to the public.

2. Do you have clearly defined course objectives?
3. Is your Outline Complete?
4. Do you have a Cover Title?
5. Do you have a Cover Image (optional)?
6. Do you have a Course Description?
7. Do you have a PDF file for users to download and print? Make sure the test and study guide are not included. The test must be done online.
8. Review all your text... Are there any spelling errors or missing punctuation marks?
9. Do all of your images appear as you intended?
10. Is your glossary complete? Are there any spelling errors?
11. Are all of your test questions finalized? Do all the questions make sense and relate back to the content? Are there any spelling errors? If you used images or media do they appear correctly?

Contact Information/User Help

There are two different types of help that you can use. The first is to contact the people directly responsible for the content management. They are as follows in alphabetical order:

1. Robert Carter - robert.carter@philips.com - 1-800-692-4295 - content and technical
2. Barbara Lebron – barbara.lebron@philips.com
2. Paula Sanderson - paula.sanderson@philips.com

The second type of help is what is called technical assistance or “User Help”. The User Help button is available at all times through the header bar, as shown here. Clicking on User Help will automatically capture as much information as it can from you including your contact information, browser, etc. It will require you to fill in some information. Please proceed to the next page.

1. It will automatically fill in your phone number with the one that is in your authoring profile. If there is a change to this or you are working at a different location please note the change.

2. Enter the module number and title you were working on.
3. Insert the URL information for the page you were working on when you got the error. You can do this by going to the address bar and copying and pasting the information into the field.
4. If you received an error message, paste the information into the field. This will help the programmer trace the error and resolve it rapidly.
5. Lastly, we can sometimes track down an error through a sequence of events so if you can identify what you were doing just before or during the time you got the error you could be adding valuable information.
6. Be sure to click on the “Submit” button. This will automatically send the problem report to the programmer and technical assistance.

HTML Help

For those of you wishing to use HTML (Hyper Text Markup Language) you are more than welcome to. The Module Creation System is fully capable of handling HTML tags. A “HTML Help” button is located on the header bar, as shown above. By clicking on the button you will actually open a new window containing common tags and examples on how to use the tags. This feature is available at any time. Please go to the next page to see an example of this screen.

HTML scripting is really very simple. As I stated earlier, it is a series of tags that define how the text is supposed to be formatted. The most common tags you will use have been included in the HTML Help guide.

Here’s what’s included:

- Bold
- Italics
- Underline
- Superscript
- Subscript
- Font attributes
- Format/Spacing Tags
- Line Break
- Paragraph Break
- Blockquote
- Lists - Unordered and Ordered
- Rule Tags
- Link Tags - Anchors
- Tables - Simple and Complex

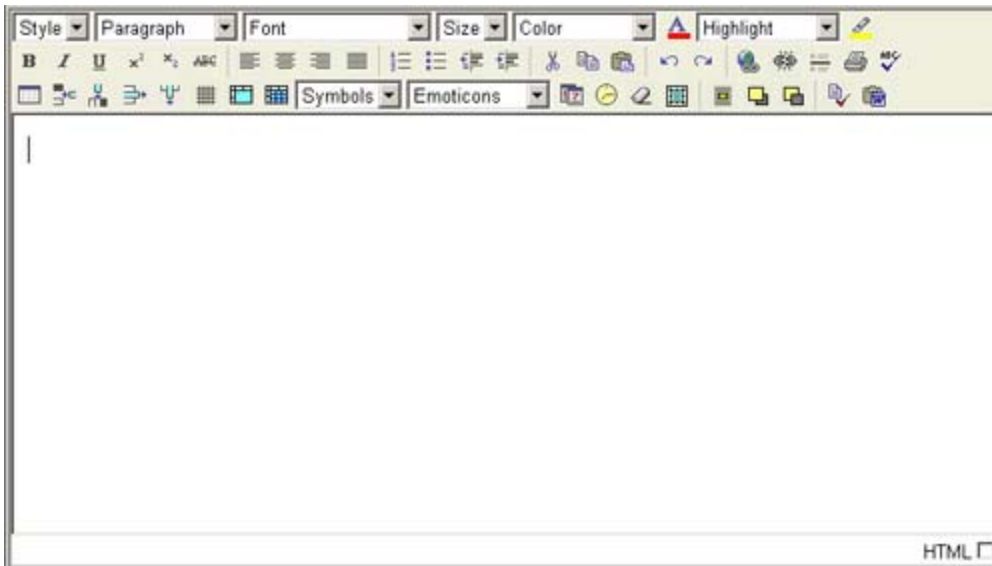
A real nice feature of the HTML Help is that you can print out the sheets for reference and have them on hand as you work.

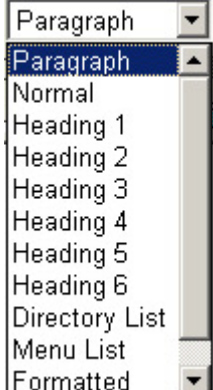

HTML Helpful Hint

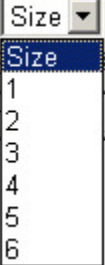












If you are not comfortable with HTML coding you can purchase a WYSIWYG (pronounced Whizzy Wig), what you see is what you get, program or use the HTML feature in Microsoft Word. These programs will automatically generate the code necessary to format your text as you would like it to appear in your module. Some of the WYSIWYG programs are quite affordable and will do everything you need without having to learn a complex program. In addition to Microsoft® Word™, you can use Microsoft® FrontPage™, Macromedia® Dreamweaver™, Adobe® GoLive™ and the list goes on. You can expect to pay anywhere from \$130 to \$700 depending on the package you purchase and how serious you want to get.





















Appendix:


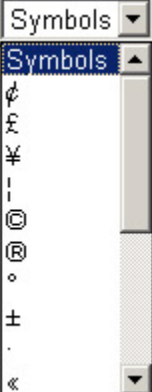








Key to WYSIWYG formatting:






 <p>Paragraph Paragraph Normal Heading 1 Heading 2 Heading 3 Heading 4 Heading 5 Heading 6 Directory List Menu List Formatted</p>	<p>Paragraph: The paragraph function allows you to choose between a variety of styles for your text. The best way to become familiar with the different paragraph styles is to try it out. Normal is identical to what you see here</p>
 <p>Font Font Arial Arial Black Comic Sans MS Courier New Georgia Impact Lucida Console Palatino Linotype Tahoma Times New Roman</p>	<p>Font foreground colors. Specify the font colors that appear, and under what names.</p>

	<p>Font size. Specify the allowable font sizes (1-6).</p>
	<p>Font foreground colors. Specify the font colors that appear, and under what names.</p>
	<p>Font highlight colors. Specify the font background colors that appear, and under what names.</p>
	<p>Bold. Applies bold formatting to text.</p>
	<p>Italic. Applies italic formatting to text.</p>
	<p>Underline. Underlines text.</p>
	<p>Superscript. Applies superscript formatting.</p>
	<p>Subscript. Applies subscript formatting.</p>
	<p>Strikethrough. Places a line through the middle of text.</p>
	<p>Justify left. Aligns text to the left.</p>
	<p>Justify center. Aligns text in the center.</p>
	<p>Justify right. Aligns text to the right.</p>
	<p>Numbered list. Arranges text in an ordered list.</p>

	Bulleted list. Applies/removes bullets from text.
	Outdent Reverses the effect of the indent feature.
	Indent. Indents text.
	Cut. Cuts text to the clipboard.
	Copy. Copies text to the clipboard.
	Paste. Pastes text from the clipboard.
	Undo. Undoes the last editing action.
	Redo. Performs the last undone action.
	Insert hyperlink. Apply a hyperlink to a specified URL.
	Remove link. Removes hyperlink from text or image.
	Insert rule. Inserts a horizontal guide rule into the document.
	Print. Prints the document in the editor.
	Spell Checker. Checks spelling on the current page.
	Insert table. Inserts a grid-style table into the document.
	Insert table row. Inserts a new horizontal row into a table.
	Insert table column. Inserts a new vertical column into a table.
	Remove table row. Removes a horizontal row from the table.
	Remove table column. Removes a vertical column from a table.
	Toggle Grid. When you create a table there is a border around the table and between the cells by default. This enables you to see what cell you are entering data into. By clicking on the html check box at the bottom of the edit screen, you will see all the html code that you have created behind the scenes. You have the ability to modify the border size by entering a different number in the text area. 0 will give you a table with no border. Number increasing from 1-5 will give you a thicker line.
	Merge cells. Takes multiple cells and merges them into one. If you click in one of the cells of a table and then click on the merge cells icon it will merge two cells together. If there are three cells in a row then click twice to combine all three into one.

	<p>Split cells. This does just the opposite of merge cells. By clicking in a cell and then clicking on split cell it will split the cell into two. Click again and it will split into three cells.</p>
	<p>Symbols. This menu provides a range of symbols that can be rapidly inserted into the document even if they are not present on the user's keyboard. The content of this menu is fully customizable.</p>
	<p>Emoticons. Displays a list of emoticons for use in communication applications like forums and message boards. We have left these available although I can't imagine why you would use them in an educational module unless you are teaching the basics of instant messaging.</p> 
	<p>Insert date. Inserts the current date into the document using the locale of the end user's machine.</p>
	<p>Insert time. Inserts the current time into the document using the locale of the end user's machine.</p>
	<p>Remove formatting. Takes formatting out of a selected section of the edit page. This is used by clicking and dragging over a region and then clicking on the remove formatting icon.</p>
	<p>Select all. Selects everything in an area or on the page depending on the presence of the blinking cursor. If the blinking cursor is showing then it will select that section. If the</p>
	<p>Absolute position. Absolute position is used to send an object or text to an exact position.</p>
	<p>Bring forwards. Brings an object forward in order. Similar to the layers in many of the paint programs.</p>

	<p>Send backwards. Sends an object backward in order so that it is displayed behind another object.</p>
	<p>Clean HTML. Clean HTML is used to strip out the extraneous garbage that is generated by many of the word editors, slide programs, or other programs that you may be using. Often times when using Word and then copying and pasting directly from the program there are unused tags that can generate errors because other html programs do not recognize the additional tags as valid programming.</p>
	<p>Paste Word. Pastes directly from Word with all the formatting.</p>