

STRUCTURAL BUILDING COMPONENTS MAGAZINE

November 2002

Web Based Education — A New Paradigm (Part 3) by Rick Saindon

During the pilot test, we discovered that even professionals, who are motivated to advance their careers through continuing education, need varying amounts of encouragement and feedback to keep on track. We are all too busy and need a gentle nudge to overcome procrastination. The need to keep web-based online students connected to the content expert (instructor) and the corporate training coordinators became our greatest challenge. This was also the most significant concern raised against the idea of self-paced web based training. Our goal was to analyze the traditional classroom environment and provide a hybrid solution that provides the best advantages from both: classroom and online training. We also discovered that since the students' progress was being tracked within our database, we could provide a level of feedback to instructors and corporate training coordinators seldom available for classroom students.

To address this critical challenge, we developed the following features within the WTCA Web Training System:

- Detail Course Statistics made available to the student, the instructor and the corporate training coordinators.
- An automatic Student Status Report emailed to training coordinators on a periodic basis.
- A Frequently Asked Question (FAQ) function that allows any student to easily add their own questions.
- A course-focused forum that would allow students to interact with each other, the instructor and the training coordinator. This private forum is intended to be moderated by the course instructor.
- Live instructor-led chat sessions to provide some of the key elements of a classroom environment.

Control Panel/Options


My Account

My Courses & Privileges










Administration Functions (Reps Only)

Purpose: Use this tab to see the courses for which you are registered, and the status of each course, as well as to assigned to you.

Course Information

Step 1: Select the course you would like to run by clicking the radio button to the left of the course name below. course name. Click on the  icon by the course name to download the materials associated with that course.

NOTE: To see detailed statistics on a course below, click the  in the **Status** column.

Run	Name Section to Run % Complete	D/L	Status	Started
<input type="radio"/>	Jay's Online Testing 11. Copy of 9... (0%)			05/14/02
<input checked="" type="radio"/>	Truss Technician Training Level I 1. Introduction (complete)		 	05/09/02
<input type="radio"/>	1. Introduction (complete) 2. Terminology (complete) 3. Design Responsibilities (complete)			09/05/02
<input type="radio"/>	4. Truss Math (complete) 5. Design Principles (27%) 6. Truss Materials (0%) 7. Load Development (23%) 8. Truss Design, Mfr & Install (0%) 9. Connections (0%) 10. Truss Design Drawings (0%)			08/01/02

Sta

course:

Control Panel/Options

 Show Help 

My Account

My Courses & Privileges

Administration Functions (Reps Only)












Corporate/Personnel Info

Course Registration

Assign Management Functions

Course to register:

Sort by: ☒ Individual ☐ Course

Add	Individual	Drop	Courses already registered	Status	Started	Completed	Expires	Score	Submitted
<input type="checkbox"/>	Ms. Linda Alfonsi								
<input type="checkbox"/>	Ms. Melinda Caldwell	<input type="checkbox"/>	WTCA-Demo		08/29/02		12/31/10		n/a
<input type="checkbox"/>	Mr. Ryan Dexter								
<input type="checkbox"/>	Mr. Jay T. Edgar	<input type="checkbox"/>	Truss Technician Training Level I				12/31/03		n/a
		<input type="checkbox"/>	TTT1-Student-Tutorial				12/31/10		n/a
		<input type="checkbox"/>	WTCA-Demo				12/31/10		n/a
<input type="checkbox"/>	Mr. Jeff Gillardi	<input type="checkbox"/>	Truss Technician Training Level I	 	07/31/02		08/31/02		n/a
		<input type="checkbox"/>	WTCA-Demo		08/01/02		12/31/10		n/a
<input type="checkbox"/>	Ms. Lora Gillardi								
<input type="checkbox"/>	Mr. Kirk H. Grundahl	<input type="checkbox"/>	TTT1-Student-Tutorial				12/31/10		n/a
		<input type="checkbox"/>	WTCA-Demo				12/31/10		n/a
<input type="checkbox"/>	Ms. Suzi M. Grundahl								
<input type="checkbox"/>	Mr. Curtis Klutsenbaker	<input type="checkbox"/>	Truss Technician Training Level I	 	05/08/02		08/31/02		n/a

The Corporate Training Rep. Assistant Training Reps and Training Coordinators will have access to the detail Course Statistics pages for all of their students and each course they are enrolled in.

Course Statistics by User

Mr. Rick Saindon

Truss Technician Training Level I

Section	Quizzes							Pages		
	Questions			Points (of those answered)			Avg # times answered	% viewed*		
	Total	# Answered (%)	Possible	First time	Last time			once	repeats	
1. Introduction	2	2 100%	2	1	n/a	3.0	95	101%	428%	
2. Terminology	2	2 100%	2	1	1	1.0	159	65%	101%	
3. Design Responsibilities	5	5 100%	5	1	1	1.0	34	21%	50%	
4. Truss Math	57	57 100%	57	16	16	1.0	114	11%	18%	
5. Design Principles	15	4 27%	4	3	2	1.5	56	36%	98%	
6. Truss Materials	11	0 0%	n/a	n/a	n/a	0.0	79	51%	63%	
7. Load Development	22	5 23%	5	2	2	1.0	111	13%	28%	
8. Truss Design, Mfr & Install	8	0 0%	n/a	n/a	n/a	0.0	173	8%	18%	
9. Connections	4	0 0%	n/a	n/a	n/a	0.0	75	7%	19%	
10. Truss Design Drawings	13	0 0%	n/a	n/a	n/a	0.0	40	93%	148%	
Summary:	139	75 54%	75	24	22	1.1	936	37%	90%	

*Please note: Statistics in these two columns are subject to some error.

To: TrainingCoordinator@AnyWTCAcompany.com

From: [\[redacted\]](#)

Subject: Automatic WTCA Student Status Report

The following Student Status Report was generated for your convenience by the WTCA Web Training System.

Student Name:	Course	Complete%	Correct%	Time Spent	Pages Viewed
Ann-S:	Truss Technician Training (level-1)	54%	82%	152 minutes	945
	Truss Technician Training (level-2)	20%	87%	114 minutes	569
Jeff-B:	Truss Technician Training (level-1)	54%	82%	152 minutes	945
	Truss Technician Training (level-2)	20%	87%	114 minutes	569
Fred-W:	Truss Technician Training (level-1)	54%	82%	152 minutes	945
	Truss Technician Training (level-2)	20%	87%	114 minutes	569

For detail Course Statistics (by section), click on the [course name](#) above.

If you are not the appropriate person to be receiving this report, please contact WTCA to let us know.
WebSupport@WoodTruss.com

Thank You

The "Course Statistics by User" page provides a detail (section level) analysis of student progress for each course they are enrolled in. This information is also available to the Corporate Rep, Assistant Reps, Training Coordinators and the course instructor. The student can access this information from the "My Courses & Privileges" tab by clicking on the small spy-glass in the "Status" column. Non-students who are authorized can view student progress

from the "Course Registration" tab within the "Administration Functions."

The statistics page includes the following information for each section and summary totals for the entire course:

- An indication of % Complete; by displaying how many questions have been answered out of the total number of question offered.
- An indication of % Correct; by displaying how many correct answers were entered out of the questions answered (so far). The student's first answer to each question is always retained in our database to help us determine how effective the training content is and where we might need to make course improvements. The student can re-take each quiz any number of times. We then show a total count of their most recent "Last time" answers, and the average # of times they re-answered the same quiz questions.
- An indication of Time Spent; by showing the percent of training pages they only viewed "once," as opposed to "repeat" viewings. We also plan to include the total session duration time each student spent viewing each section within the course.

The course navigation bar will include three new options: FAQ, forum and chat.

Frequently Asked Questions

Main category: Technical Subcategory: Connectors

Select your question:

- [ALTERNATE NAILING PATTERNS](#)
- [ATTACHMENT OF SCISSORS TRUSSES](#)
- [BLOCKING FOR LATERAL DISPLACEMENT AND ROTATION](#)
- [BRACKETLESS CONNECTIONS](#)
- [HANGER NAILS ABOVE THE NEUTRAL AXIS](#)
- [JACK TRUSS CONNECTIONS TO GIRDER](#)
- [NOTCHED TOP CHORDS ON GABLE ENDS](#)
- [PARTITION WALL ATTACHMENT TO BOTTOM CHORDS](#)
- [ROOF TRUSS NAILING WITH HURRICANE CLIPS](#)
- [TRUSS ATTACHMENT INFORMATION](#)
- [UPLIFT REACTION NUMBERS](#)

Is your question in this area not listed? [Submit !!!](#)

ALTERNATE NAILING PATTERNS [Top of page](#)

Question: A lot of roof truss nailing patterns call for 16d common nails. Most nail guns do not shoot 16d nails, but will adequately sink a 12d nail. Is there a substitution guide or NER report that could help us?

Answer: [VIEW CONVERSION CHART](#) courtesy of Simpson Strong-Tie. Notice that when a 16d common nail is replaced with a 10d/12d common nail, they only achieve 84% of the load transfer. The number of nails would have to be increased by a factor of 1/0.84. Maintain the same nail spacing but cut the plywood gusset slightly larger to account for the extra nailing.

In order to solve this problem at the source, you should contact the truss manufacturer and ask that they provide all future nailing schedules in terms of a nail sizes that can be reasonably expected to be used on site.

Note: The student can request new questions to be added to the FAQ database.

The forum feature, shown in part below, is a full function web based news group. It is only available to students enrolled in a specific course and is moderated by the course instructor to address questions or issues. It is a great way for students to interact with and help each other by sharing knowledge, insights and questions.

Truss Technician Training (Level1)

Search

Thread	Author	Activity Date	Replies
Can you add Attachment Upload functionality?	guest/guest	10/28/2001 9:41:02 PM	3 edit
Is this CodeCharge app?	Rick Stosimos	9/24/2001 9:48:48 AM	2 edit
Improvements, anyone ?	UltraApps	9/24/2001 9:45:26 AM	1 edit
Email Notifications	PK	9/22/2001 6:58:26 PM	1 edit

Discussion Message

Topic*

Author*

Message*

You guys rock!
 Can you also add functionality to attach files to issues ? Or can I do this somehow ?

Original Message

Forum [Truss Technician Training \(Level1\)](#)

Topic [Can you add Attachment upload functionality?](#)

Author guest/guest

Date Created 9/22/2001 11:20:24 AM

Message

You guys rock!
 Can you also add functionality to attach files to issues ? Or can I do this somehow ?

Responses

Topic Re: Can you add Attachment Upload functionality?

author UltraApps

Date Created 9/22/2001 2:33:21 PM

Message

Sure. We'll try to add it in the next version.
 The only issue is that there is no clean method to implement uploads in ASP and you'll need to install some commercial component for this. So, it will be something that we may not be able to support.

Topic Re: Can you add Attachment Upload functionality?

author DJC

Date Created 9/24/2001 9:46:42 AM

Message

Hello.
 There are some free upload objects that work very very well.

Lastly, WTCA will be pre-scheduling “live” public chat sessions for a limited number of enrolled students from any corporate subscriber on a first-come first-served basis. This will be a free service included as part of the yearly subscription fee. We will also offer private (single corporation) chat sessions for an additional fee.

A link from the scheduled chat session subject description will provide a detailed outline and

focus for that session. Based on this information, students should be prepared ahead of time to interact intelligently with the instructor and other students. The instructor will need to keep the discussion focused and on track.

A live (surveillance mode) web-cam of the instructor can be used by the instructor to share ad-hoc drawings and documents during the chat session. This could also allow the instructor to be heard by all participants.

At the conclusion of the chat session, the instructor will give students a short quiz based on the content of the session. Chat broadcast will be turned off at this point to keep student answers private. The entire chat dialog, (with quiz questions and answers) is retained in our database for subsequent on-demand replay and scoring analysis. We may also create a custom online training section for some live chat sessions, to include our standard database driven quiz sub-system.

As we pointed out in [Part 2 of this series \(SBC Magazine Sept/Oct 2002\)](#): our primary goals were to provide an effective alternative to the traditional classroom learning experience. To do this, we needed to directly and frequently engage the student. By retaining the students' quiz results in our database, we provide a tremendous opportunity to:

- Assist the student during the training process by identifying individual learning “blind-spots.”
- Continuously evaluate and improve our training platform (both content and delivery)—learning difficulties common to all students, should fall on the platform not the individual student.
- Provide accountability for the student to off-set a natural tendency to procrastinate.
- Help instructors track their students' progress, jump in when needed and correct content or delivery.
- Allow corporate training coordinators the ability to balance workload and priorities to maximize the learning experience.

We are convinced that the advance web based training features outlined above, will ensure that we accomplish these goals.

Look for Part 4 next month where we will explain the final set of advanced features that are designed to provide a web-based safety net of customer service and support for students and corporate reps.

[SBC HOME PAGE](#)

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