

California State University, San Bernardino

CSUSB ScholarWorks

Innovative Course Redesign Grant Reports

Teaching Resource Center

5-6-2011

Dan Rinne and Peter Williams CD Summer 2010

Dan Rinne
CSUS, drinne@csusb.edu

Peter Williams
CSUSB, pwilliam@csusb.edu

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/trc-cd>



Part of the [Higher Education and Teaching Commons](#)

Recommended Citation

Rinne, Dan and Williams, Peter, "Dan Rinne and Peter Williams CD Summer 2010" (2011). *Innovative Course Redesign Grant Reports*. 29.

<https://scholarworks.lib.csusb.edu/trc-cd/29>

This Other is brought to you for free and open access by the Teaching Resource Center at CSUSB ScholarWorks. It has been accepted for inclusion in Innovative Course Redesign Grant Reports by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

Quiz and Database System for Interactive Precalculus
by
Dan Rinne and Peter Williams

Final Report to the TRC
May 7, 2011

As part of a Teaching Resource Center (TRC) grant in Summer 2010, the authors developed a database and a system of quizzes (hereafter called the system) linked to the interactive web based course materials *Interactive Precalculus* (IP) located at <http://colalg.math.csusb.edu/~devel/IT>. The system allows student scores on quizzes to be recorded and logged in a database and to be reconstructed for viewing either by the student or the instructor. The student takes the quiz online and is provided with an immediate score as well as a solution to the problem. In addition, the student can obtain for his/her record a pdf document of the quiz. The overall plan is to develop an online quiz for each of the twelve topic areas in IP. The scope of the TRC grant was to develop the database and the first two topic area quizzes. The authors were not only able to develop the database and an authentication product for the system but were also able to create three topic area quizzes. The remaining nine topic area quizzes are to be completed as part of a TRC grant in Summer 2011.

The system allows for three types of user – an instructor, a student, and an administrator. Instructors have the privilege of being able to create classes, quizzes and practice quizzes for their students in each of their classes. They can set the dates of when a quiz is available. They also generate access codes to distribute to their students. An instructor can view the student quiz scores. Students create their own username and password and use the access code they are provided with to link themselves to the correct class, thereby populating the class roster. They can view prior quizzes and take practice or assigned quizzes. The administrators typically set up instructor accounts and manage user accounts.

The system comprises of java applets to present the quizzes, php web pages to manage page navigation and web page presentation. The database uses MySql.

The system is currently being tested out in two sections of the precalculus course, Math 120, in Spring 2011 and Dr. Rinne is the instructor for both sections.

In those two sections 57 students took online quizzes. A few students had to install the java plugin to run the quizzes but most seemed to solve that problem on their own or with the help of a friend. For almost all students, registering to access the pages and adding a particular section using the access code we emailed them was not a problem. By forgetting his password, one student helped us by locating a mistake in the password reset page that will be easily fixed this coming summer. Once the students were able to access the pages and quizzes the actual quiz taking seemed to run smoothly. Due to the timing of the quizzes, the pace at which the material is covered in the text (the IP pages were used for additional exercises and unrecorded practice quizzes), and the limited number of IP topics prepared for quizzing in summer 2010, only two online quizzes were taken using the system this spring quarter.

We are evaluating student responses to the system as well as collecting comments and concerns from students for improvement. Most of their responses were very positive. Common were such comments as “I had no problem working with the online quiz website,” “I enjoyed the online quiz aspect,” “it’s a great idea to continue using the site,” and “you can learn from your mistakes on the practice quizzes.” Only two students still have not resolved the plugin problem on their primary computer but they had access to other machines to access the site.

Sample Class Report for Quiz 1 and Classcode 43

Results for classcode=43 quiz 1 with total 16. (Real names have been replaced)

Last name	First name	Score	minutes	Date
Al	A	16	22	2011-04-13 17:54:35
A	R	10	63	2011-04-13 23:39:42
B	J	10	29	2011-04-13 23:00:06
C1	E	12	74	2011-04-13 23:51:36
C2	B	16	22	2011-04-13 17:40:28
C3	A	12	26	2011-04-13 23:14:03
Pal	C	13	41	2011-04-13 22:22:56
Lim	d	13	40	2011-04-13 22:41:20
Len	b	13	171	2011-04-13 16:48:41
G	a	14	18	2011-04-13 21:39:06
Crad	D	13	47	2011-04-13 16:16:26
Reb	z	15	20	2011-04-13 22:11:47
Pat	o	15	49	2011-04-13 19:19:31
Sail	p			
Sill	q	11	55	2011-04-13 20:26:46
Sal	w	11	22	2011-04-13 20:23:19
Trew	v	12	80	2011-04-13 22:53:49
ob	E	12	36	2011-04-13 19:36:49
R	D	12	49	2011-04-13 23:48:30
P	B	13	12	2011-04-13 17:17:41
Manni	A	13	39	2011-04-13 22:53:18
Pisa	M	10	25	2011-04-15 12:37:51
Lobo	N	10	16	2011-04-13 12:48:35
Ariel	k	4	4	2011-04-14 14:25:46
Jack	h			
Tom	j	13	47	2011-04-13 20:20:43
Peter	u	15	20	2011-04-13 12:53:15
Pan	y	13	26	2011-04-13 18:31:45
Mimi	t	12	42	2011-04-13 16:19:25
T	r			
W	x	15	48	2011-04-13 18:55:07
Y	c	13	17	2011-04-13 15:09:45