

CARNet

HRVATSKA AKADEMSKA I ISTRAŽIVAČKA MREŽA

Presentation of WebCT usage in deploying quiz assignments

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Introduction

WebCT (Web Courseware Tool)

- Developed at University of British Columbia, Canada, in 1995
- Used in over 80 countries and over 2200 institutions worldwide
- Translated in 14 languages
- Since 1997 – further development and distribution through private company

WebCT in CARNet

- Used since 1999 (in CARNet)
- Over 50 courses and 1000 students
- 10 courses with quizzes
- Free access for self testing in IT knowledge
- 10 training courses for designers

WebCT quiz - advantages

- Self-tests – no evaluation, unlimited number of attempts
- Quiz – automatic evaluation
- Maximum objectivity
- Feedback – possible and recommended
- Results – questions, answers, grades
- Easy creation of new quiz
- Questions can be re-used

WebCT quiz - disadvantages

- Time requirements for creating questions and possible answers (correct and incorrect)
- Large database of questions needed
- Limited number of types of questions
- Quality of questions
- Cheating
- Technical problems

Experience

- 3 quizzes in 2001 and 2002 for 40 students
- Small database of questions
- Only 30% of total grade
- Two types of questions (out of five)
- 22 quizzes in 2003 for 155 students - mean grade was 51%

Problems

- Manual input of questions
- Question conversion from other tool (MS Word)
- Support for languages like Croatian, Russian, Polish, ...
- Mistakes in questions

4Question statistics (1/2)

Title	N	% Correct Of:			Discrimination	Score	
		Whole Group	Upper 25%	Lower 25%		Mean	SD
🔍 Services and protocols	3	100	100	100	0.00	100.0%	0.0
🔍 Remote computer access	3	66	100	50	0.41	66.7%	57.7
🔍 News groups	4	25	0	50	-0.76	25.0%	50.0
🔍 Access to Internet Content	3	100	100	100	0.00	100.0%	0.0
🔍 What is server?	3	100	100	100	0.00	100.0%	0.0


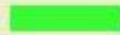

Question statistics (2/2)

Question News groups

News groups are collection e-mails and articles. Articles:

- 1. Can be read by everybody, and send by everybody.
- 2. Can be read by everybody but can be send only by subscribers.
- 3. Can be read and send only by subscribers.

Response Summary

Answer	Value	Frequency Distribution	
-	0%	6	
1	100%	1	
2	0%	0	
3	0%	3	

Quiz statistics

First Name	N	Mean	SD
Davor	1	100.0%	0.0
Hrvoje	3	73.3%	4.6
Luka	1	77.5%	0.0
Maja	1	80.0%	0.0
Robert	1	70.0%	0.0
Tomislav	2	80.0%	4.2
Vladimir	1	100.0%	0.0
Totals:	10	80.8%	4.1

How to prevent cheating (1/4)

Problems

- Looking in books
- On-line search
- Asking another person
- Another person taking the quiz
- Copying from another person

Solutions

- Limited time
- Large database
- Personal passwords
- Time of access
- Different questions for each student
- Limitations on IP base

How to prevent cheating (2/4)

Basic settings

Quiz title

Question titles Show the question titles when students view the quiz.

Question delivery Deliver all the questions at once.
 Deliver one question at a time, where any question can be revisited.
 Deliver one question at a time, where students must answer or skip each question to proceed. Once a question has been answered or skipped it cannot be revisited.

Quiz duration Number Units (Disallow answer submission if time has expired.)

Attempts allowed

Attempts separation Minimum time between attempts:
 Number Units

Availability

Available after Month Day Year Hour Minute

Available until Month Day Year Hour Minute

How to prevent cheating (3/4)

Selective release

Release to

Release based on

Criteria	Comparison	Value
---	Not blank	<input type="text"/>

Hide Remove this quiz from quiz/survey lists if students do not meet the selective release criteria.

Security

Proctor password Students must enter the password to gain access to the quiz.

IP address mask Only machines which match the IP mask

1st 2nd 3rd 4th

. . .

... may be used to access the quiz.

Submission

Submission message

Email submissions Send a copy of each student's submission via e-mail to

How to prevent cheating (4/4)

Results

- Student score If multiple attempts are allowed, use the score for the student's grade.
- Student score release *Allow students to review their submitted Quiz. Show the Quiz score if it has been graded or partially graded.*
- Release the score once the quiz has been submitted.
 - Release the score once the quiz has been submitted *and* all the questions have been graded.
 - Release the score once the availability period has ended
 - Release the score once the availability period has ended *and* all the questions have been graded.
 - Do not release the score.
- Release column *Release the Quiz column so students can see their grade in the MyGrades tool. You can also control the release of this column from the Manage Students page. (See Manage Course > Manage Students.)*
- Yes No
- Student results display
- a) Show the question text for each question.
 - b) Show the student's response for each question. (requires: a)
 - c) Show the evaluation of the student's response *only*. (requires: a, b; excludes: d)
 - d) Show the full evaluation of each question. (requires: a, b; excludes: c)
 - e) Show the correct answer for each question. (requires: a, b)
 - f) Show the feedback for each question.
 - g) Show the student's score for each question.
 - h) Show all the grader's comments for the quiz.
 - i) Show the student's total score for the quiz.

Helpdesk

Problems

- > Divert time in quiz accessing
- > Different knowledge in IT
- > Connectivity

Solutions

- > Good pre-quiz instructions
- > Continuous tracking of students
- > No solutions

Quotation

This kind of testing is very nice and efficient, and most important part is that in this test we can learn more and easier than only copying from lectures. For instance, after the quiz I can look what I did wrong and learn more than looking in my notes from lectures. Also, I think that self-test is very useful in subjects like Mathematics and Logics. The only thing that was my problem was technical stuff - taking on-line exam for the first time can be very confusing.

We are approaching the west.

Recommendations

- Large database of questions
- Smart answers
- Careful selection of quiz settings
- Creating good feedback for correct and incorrect answers
- Pre-quiz instructions
- Continuous checking of student feedback

Feedback

- Should:
 - ▶ be provided quickly and be useful and point to accessible resources
 - ▶ have ability to modify and improve students work
- Can influence their motivation:
 - ▶ Positive – as “reinforcer”, to increase the likelihood of the desirable behavior
 - ▶ Negative – as self-devaluative, to lead to escape, avoidance and denial

References

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4. Peter Knight: *Assessment for Learning in Higher Education*, Staff and Educational Development Series
5. <http://plagiarism.phys.virginia.edu/>
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Questions