Crib sheet for academics: Recommended settings for Blackboard multiple-choice question (MCQ) quizzes

Overview of the Process:

- 1) Check you have confirmed/decided on the following:
 - a. Course code.
 - b. Quiz title.
 - c. Minimum 3, maximum 10 questions with answer options correct option first.
 - d. At least one feedback comment per question (feedback tailored to answer options chosen may be beneficial).
- 2) Navigate to the required place in the appropriate course.
- 3) **Build the quiz** use the settings below and ensure the quiz is not visible to students until finalised.
- 4) **Proof read the quiz** (correct any spelling mistakes, check whether quiz can be passed i.e. 40 to 50% or more by selecting the longest answer to each question. Does the quiz seem too easy? How challenging do you want it to be for students an easier first quiz might be appropriate, or it may be helpful to set questions that consistently reflect the standard required for the final assessment.).
- 5) **Review and release:** where possible, ask a Ph.D. student or post-doc to help test the quiz before it is released to students. if any further assistance is needed, contact <u>elearning@manchester.ac.uk</u>.

NB: A "tips" section about writing MCQ questions, answers and feedback can be found at the end of this document. This includes example wording for 'description' and 'instructions' using National Student Survey (NSS) question terminology.

Settings to use for MCQs - for consistent student experience

(Developed in conjunction with Steve Pettifer, Assistant Vice Dean for Teaching and Learning.)

1. Add an introductory item (optional)

Once in the relevant course unit, in the appropriate place for the quiz, consider adding an "item" to introduce the quiz (series), set expectations and provide context. An example wording for this can be found at the end of this document. Remember to make this item hidden to student view until ready for release (at the same time as the first quiz), by using the following settings:

STANDARD OPTIONS —	
Permit Users to View this Content	Yes No
Track Number of Views	Yes No
Select Date and Time Restrictions	Display After Enter dates as dd/mm/yyyy. Time may be entered in any increment.
	Display Until
	Enter dates as dd/mm/yyyy. Time may be entered in any increment.

2. Create a new test

Click the menus Assessments > Test, then click "Create" to add a new test.

Complete the following:

Name

Description – see tips section at end

Instructions – see tips section at end

Click "Submit"

3. Question settings
Click "Question settings" (top right-hand corner):
Change (or consider changing) the following settings:
FEEDBACK
Provide feedback for individual answers.
Only if different feedback is provided for each answer option. If only two sets
of feedback – one for a correct answer and one for incorrect answers - there
is no need to tick this box.
QUESTION METADATA
Add categories, topics, levels of difficulty, keywords and instructor notes to questions.
SCORING
☑ Specify default points when creating questions. Default point value 10
Use the currently assigned points when finding and adding questions.
 Use default points when finding and adding questions. Specify partial-credit options for answers.
Provide option to assign questions as extra credit.
DISPLAY
Specify random ordering of answers.
 Specify the horizontal or vertical display of answers. Specify numbering options for answers.
Specify flutificeting options for answers.

Click "Submit" to confirm new settings.

4. Create the questions:

Click "Create Question" > "Multiple Choice"

5. Add "Question Title" and "Question Text" as provided by academic.

Note: "Question Title" is optional. Using titles such as Question 1, Question 2, etc., will be confusing later on if you wish to repurpose any of the questions, so is not recommended. If no title is entered, questions can be identified by the first few words of the question text.

Tips for writing question text can be found at the end of this document.

6. Add the answer options

Change the options to the following (this will help to discourage collusion and make any repeat attempts less 'familiar' to students):

OPTIONS -	
If partial credit is al for that answer.	lowed, each incorrect answer can specify what percentage of the total points should be given
Show Answers in Random Order	

Change the number of answers, if necessary (default is 4 – between 3 and 5 options are recommended).

Add the answers (to save time, add the correct answer first, as this one is marked correct by the system by default).

CAUTION! DO NOT COPY AND PASTE THE ITEMS DIRECTLY FROM A WORD DOCUMENT INTO THE ANSWER AREA AS THIS WILL CAUSE FORMATTING ERRORS.

Formatting Tips:

- A. Use a tool like "Pure Text" to enable you to paste without formatting using a keyboard shortcut (http://stevemiller.net/puretext/). Or:
- B. Click the "HTML" button and paste directly from Word in to HTML code view this strips out the formatting. Click "Update" to close the window and then add any formatting appropriate from the answer area. Or:

C. Copy the questions into a text editor first to strip out the formatting, then copy and paste in to the Answer area in Blackboard.

Tips for answer options can be found at the end of this document.

7. Add the Feedback:

If there is only one feedback response, then enter this for both response types. Preface the correct feedback with "That's correct – "and start the incorrect response feedback with "Sorry, that is wrong –".

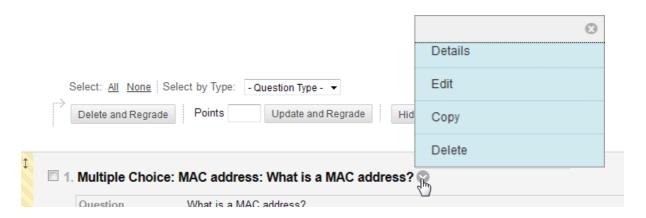
8. Submit the question (and create another)

Click "Submit and create another", which brings up a blank "Create/Edit Multiple-Choice Question" screen and ready for the next question.

When you have added all questions, click "Submit".

9. Proof read the summary page

Review the questions and if any changes are required, click the small grey dropdown arrow at the end of the question heading to see the menu options and click "edit":



Edit the question and click "Submit" to confirm.

10. Set the test options

When the quiz (draft) is finished, click "OK" in the bottom right to return to the "Create test" screen, where the test you just created is already selected.

Click "Submit".

Select	the following options:					
 ✓ S	how test description to students before	e they <mark>b</mark> egi	n the test.			
and:						
TES	T AVAILABILITY					
	Make the link available	○ Yes	No			
	Add a new announcement for this test	Yes	No			
	 Multiple Attempts Allow Unlimited Attempts Number of Attempts 					
	Score attempts using	First Gra	aded Attempt		\$	

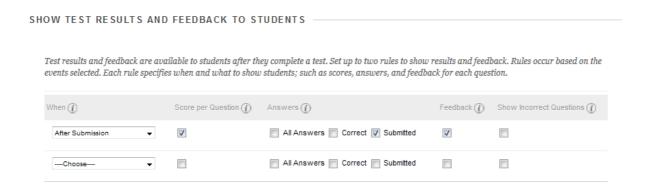
NOTE: using "First graded attempt" gives a better idea of what students have learnt and what they have misunderstood, prevents students from taking the test once just to access the feedback/correct answers so that they can score 100% on their second attempt, yet still allows the students multiple attempts at the test to check and recheck/revise their learning throughout the course unit.

Set the da	te the assessment is due. Optionally, do not allow students to take a test once the due date has passed
Submissio	ns are accepted after this date but are marked Late .
Due D	ate 06/02/2017 🔳 12:01
Enton date	s as dd/mm/yyyy. Time may be entered in any increment.

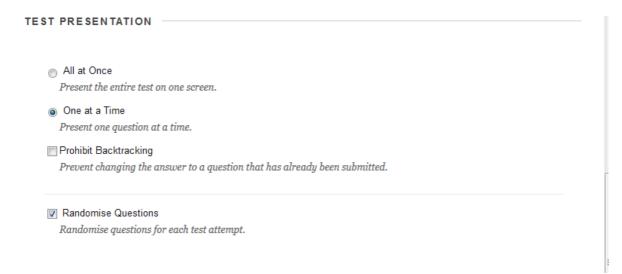
Use this if you want students to complete the test for the first time before a certain date – e.g. before the next lecture. The students will still be able to see and use the test after this date.

SELF-ASSESSMENT OPTIONS			
JL	EL -ASSESSMENT OF HONS		
	If this test is a self-assessment, choose to include or hide the scores in the Grade Centre. NOTE: If an instructor decides to include the test in the Grade Centre after it was hidden, all prior attempts will be deleted.		
	Include this Test in Grade Centre score calculations		
	Grade Centre items excluded from summary calculations are also excluded from weighting. Also note that if some weighted items are included in calculations and other weighted items are not, grade-weight calculations will be skewed.		
	☐ Hide results for this test completely from the instructor and the Grade Centre		
	If this option is selected, the instructor will not be able to see any student grades, view answers, aggregate results, or download result details. To protect student privacy, this choice cannot be reversed later without deleting all attempts.		

These settings allow the course unit staff to see quiz marks, but do not include them in Grade Centre calculations (for formative tests only, obviously!).



These options provide students with immediate feedback (and a reminder of the answer they chose).



These settings ("One at a time" and "Randomise Questions", along with the random order of answer options) make collusion more difficult.

Suggested Phrases and Tips for writing MCQs

If you have any queries please contact <u>elearning@manchester.ac.uk</u> for help.

Example wording for a Blackboard item to introduce all the MCQs that will be available for the course unit (uses key terms in NSS questions):

To help you understand how well your learning is progressing, we have devised a series of multiple-choice question (MCQ) quizzes with immediate feedback comments, which will help you develop further. These are all based on criteria for the learning outcomes / final assessment(s) for this course unit. You can use these quizzes for self-assessment both during the course unit, and again at the end for revision.

Your quiz scores do NOT count towards your final mark, but the score of your first attempt will be available for teaching staff on the course unit. This will help us to identify areas that would benefit from further work for the whole student cohort.

The quizzes will be available until the end of the semester. You can take them as many times as you like, so **you can get timely feedback comments whenever you want.**

Example wording for a Test Description – for example:

This quiz is based on lectures XXXX.

The results of this quiz do NOT count towards your final mark. However, completing the quiz and using the feedback comments provided will help you prepare for [your final exam / a later assessment / next week's lecture].

This quiz is available from DDMMYYYY to DDMMYYY/ [the end of the week/semester/year].

Created by: Kayla Barram, Credits: Stephen Wheeler, Lynn Cullimore, Hannah Cook

Example wording for Test Instructions – for example:

Complete this test by yourself. You may take this test as many times as

you like - so you can get timely feedback comments to help your

learning whenever you want - but please complete this test at least

ONCE by DDMMYYYY.

Please answer all questions.

At the end of the quiz, you will receive personalised¹ feedback comments,

based on the answers you chose. You can use this feedback to help you

understand any mistakes you make and prepare for [the next

lecture/assessment/exam].

Tips for "Question Texts" or stems:

The "Question Text" is often known as the "stem". Tips for good question stems

include:

Include any language in the stem that you would otherwise have to repeat in

each answer option. For example, a stem such as "Biology is defined as the

scientific study of:" keeps you from having to repeat "is the scientific study

of" at the beginning of each option.

Avoid unnecessary content in the stem. Extraneous details most often just

add to the students' reading time, rather than the complexity of the question.

This reduces the number of questions you can put on a test, therefore

reducing the reliability of the test.

For example: a stem like this:

"According to Tuckman's model, groups develop through several stages

over time. Furthermore, it contradicts Poole's activity-track model which

has groups switching among several different linear sequences. Which of

the following is not one of the stages identified in Tuckman's model?",

Version 1: 09 February 2017

could be cleaned up to read:

¹ Only include 'personalised' if there is different feedback for correct and incorrect answers.

"Tuckman's model of group development, where groups develop through several stages over time, does/does NOT (delete as appropriate) include: [Select all that apply]".

Tips for "Answer Options":

- Avoid lifting phrases directly from text or lecture. This becomes a simple recall activity for the student. Use new language as frequently as possible.
- Answer options should be about the same length and parallel in grammatical structure. Too much detail or different grammatical structure can give the answer away. For example, the specificity and grammatical structure of the first option here are dead giveaways:

The term "side effect" of a drug:

- a) refers to any action of a drug in the body other than the one the doctor wanted the drug to have.
- b) is the chain effect of a drug.
- c) additionally benefits the drug.
- Distracters must be incorrect, but plausible. If you can, include among the
 distracters options that contain common errors. Students will then be
 motivated to listen to your explanations of why those options are
 incorrect.

Created by: Kayla Barram, Credits: Stephen Wheeler, Lynn Cullimore, Hannah Cook • If a recognizable key word appears in the correct answer, it should appear in some or all of the distracters as well. Don't let a verbal clue decrease the accuracy of your exam. For example, someone with no biology background would not have to think very hard to make a correct guess on this question:

Every organism is made of cells and every cell comes from another cell. This is the:

- a) Relativity Theory
- b) Evolution Theory
- c) Heat Theory
- d) Cell Theory
- Help students see crucial words in the question. For example: "Which of
 the following is NOT an explicit norm?" Likewise, when you ask a
 similarly-worded question about two different things, always highlight
 the difference between the questions.
- Use Rarely:

Extreme words like **all**, **always** and **never** (generally a wrong answer). Vague words or phrases like **usually**, **typically** and **may be** (generally a correct answer). **All of the above** - eliminating one distracter immediately eliminates this, too. **None of the above** - use only when the correct answer can be absolutely correct, such as in maths, grammar, historical dates, geography, etc.. Do not use with negatively-stated stems, as the resulting double-negative is confusing. If answer options are to be shown in a random order, then a phrase like "None of these options" is advisable, instead of "None of the above".