

UNLV Best Teaching Practices Expo

Thursday, January 19, 2017

Student Union Ballroom A

12:00 - 1:30 pm

Cumulative Exams (with a twist)

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The teaching practice and the need it addresses:

- I use cumulative exams to (a) evaluate learning and (b) promote retention.
- When first hearing about cumulative exams, students generally have a negative reaction. So, to make cumulative exams more palatable to students, I do this:
 - 1) Because each exam is cumulative, a later exam gives students a second chance to demonstrate their understanding.
 - 2) Students can replace their score on the previous exam if they score higher on the next one; however, if they perform worse, their original score remains the same.

Evidence this practice benefits UNLV students:

- Cognitive research has demonstrated that repeated testing can increase long-term retention (e.g., Roediger & Karpicke, 2006). Also, distributed practice leads to better long-term retention than massed practice, such as cramming for one exam (e.g., Kornell, Castel, Eich, & Bjork, 2010).
- Putting these findings together, research has shown that students (particularly, low-scoring students) retain more material after the course is over when cumulative exams are used throughout the semester (Lawrence, 2013).
- Students are very receptive to this policy because it provides them with a second chance to do well on each exam (and potentially reducing test anxiety).

How other UNLV teachers might adopt this practice

Exam Policy:

- 1) All exams are cumulative
- 2) If the next exam is \uparrow , then the previous score is raised to that %.
- 3) If the next exam is \downarrow , then the previous score does not change.
- 4) An exam score is only (potentially) affected by the next exam.

Example (4 exams):

	Exam 1	Exam 2	Exam 3	Exam 4
Original Scores	65%	86%	90%	83%
Adjusted Scores	86%	90%	90%	83%

Does not affect course content! Applicable to any major! Increases rigor! Accepted by students!

Resources and where to find them:

- To reduce the possibility of errors, I use Microsoft Excel formulas to adjust exam scores.
- Feel free to contact me for an example Excel spreadsheet that contains these example formulas: david.copeland@unlv.edu