

Standard Setting for Courses

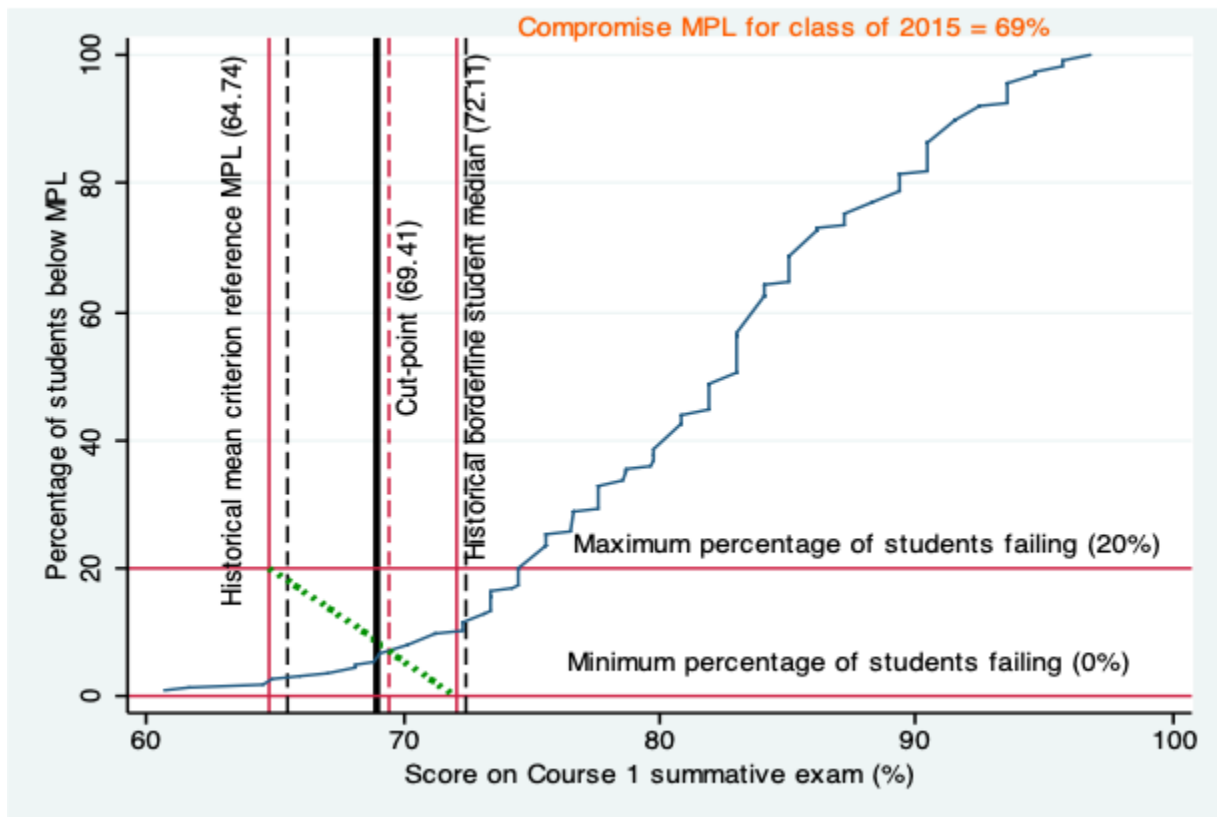
For end of course standard setting, we use a Modified Hofstee Compromise method of setting minimum pass levels on final summative course marks.

This means that we set a MINIMUM percentage of students failing our courses at zero. We set a MAXIMUM percentage of students failing our courses at 20%.

We then create a graph with our MINIMUM and MAXIMUM percentage of students failing, as well as our historical MPL (prior to the 2018-2019 academic year) and our historical borderline student median course score (this is the median score of students on the course in 2015 who passed the course but went on to fail the MCCQE Part 1 examination).

We then graph our students' actual performance (score versus cumulative percentage of students) and choose our MPL based on where a diagonal line that crosses through the square bordered by the above described limits (Figure 1).

Figure 2. Hofstee compromise method for MPL ± SEM for Course 1



As we recognize that there is a standard error of measurement (SEM is a measure of the accuracy of test scores and is related to the reliability of the test ($SEM = SD * \sqrt{1 - reliability}$)).

The smaller the SEM, the more accurate is the test score) surrounding our MPL, we set our pass mark as 1 standard error of measurement below our MPL. Students who score below the pass mark are unsatisfactory on the course. Students who fall between the MPL and the pass mark are enrolled in a mentorship-based remediation program (the SUCCESS Course, Appendix 1) aimed at improving their study strategies and their ability to self-regulate their learning.

Standard Setting for Individual MCQs

As we need a historical mean criterion reference MPL for the Modified Hofstee compromise method, whenever you create a new MCQ item, we require you to set an MPL for that question.

- We use the Nedelsky technique to set individual question MPL's
- To perform
 - Picture the “borderline candidate”. This is a candidate who is right on the border of competence/incompetence
 - Look at your options and eliminate options that you think the borderline candidate could rule out (i.e. they could rule out a and c so you are only left with b and d)
 - Calculate 1 divided by the number of remaining options (i.e. 2 options left; $\frac{1}{2}$ = 50%). This is the MPL.
 - This technique is based on the fact that the borderline candidate eliminates options that he/she knows are incorrect and then guesses between the remaining options.
 - For all questions, have 2 independent individuals perform this technique (one of which can be you) and then average the results and provide us with this estimated MPL with your new question.