AQA City & Guilds CCEA Edexcel OCR SQA WJEC

Produced on behalf of: AQA, CCEA, Edexcel, OCR and WJEC

Information for centres

Estimating the missing mark when a candidate is absent from an examination

This document explains how the missing mark is estimated when a candidate is absent (for an acceptable reason) from a unit in a specification which uses uniform marks. The same principles apply when a mark is missing because the script has been lost.

The conditions under which an estimated mark can be awarded in the case of candidate absence are set out in sections 10.2 and 10.3 of the JCQ publication *Access Arrangements, Reasonable Adjustments and Special Consideration*, which is available on the JCQ website.

All JCQ awarding bodies employ the same procedure, known as the *z-score method.* Under this procedure the difference between the candidate's estimate and the performance of candidates generally on the unit in question is the same as the average difference between the candidate's performance and the performance of candidates generally on the other units.

If the candidate performed on average slightly better than candidates generally on the other units, then the estimate for the missing mark will be slightly above the general performance on that unit.

The difference between the performance of the candidate in question and the performance of candidates generally is measured in terms of standard deviations.

A candidate whose performance on a unit is slightly above the performance of candidates generally on that unit might be 0.43 standard deviations above the mean mark for that unit. The number of standard deviations above or below the mean is called the *z*-score. All calculations use uniform marks, not raw marks.

In the examples below the means and standard deviations are exact whole numbers. Of course this would be unlikely to occur in practice but it makes the principles easier to understand.

Example 1

In a two-unit specification the mean uniform mark for all candidates on Unit 1 is 53 and the standard deviation is 5, while the mean on Unit 2 is 34 and the standard deviation is 3.

A candidate scores 43 on Unit 1 but is absent for Unit 2.

	Mean	*Standard deviation*	*Candidate's mark*
Unit 1	*53*	*5*	*43*
Unit 2	*34*	*3*	*absent*

The candidate's mark on Unit 1 is 10 marks, or 2 standard deviations, below the mean. Therefore the estimate for Unit 2 is also 2 standard deviations below the mean. This is

$$34 - 2x3 = 28$$

Example 2

In a three-unit specification the mean uniform marks for all candidates on Units 1, 2 and 3 are 50, 80 and 38 respectively, with standard deviations of 8, 12 and 3. Unit 1 accounts for 30% of the assessment, Unit 2 for 50% and Unit 3 for 20%.

A candidate scores 58 on Unit 1 and 104 on Unit 2 but is absent for Unit 3.

	Weighting	*Mean*	*Standard deviation*	*Candidate's mark*
Unit 1	*30%*	*50*	*8*	*58*
Unit 2	*50%*	*80*	*12*	*104*
Unit 3	*20%*	*38*	*3*	*absent*

The candidate's mark on Unit 1 is 8 marks or 1 standard deviation above the mean and the candidate's mark on Unit 2 is 24 marks or 2 standard deviations above the mean. The average (taking account of the weightings) is

$$\frac{30 \times 1 + 50 \times 2}{30 + 50}$$

$$= 1.625$$

Thus, the estimate for Unit 3 is

mean mark + 1.625 x standard deviation
= 38 + 1.625 x 3
= 42.875, which is rounded to 43.