ROYAL ACADEMY OF DANCE

Information for teachers on exams moderation (including worked example)

Moderation helps to ensure that exam results are as accurate, reliable, consistent and fair as possible. This is the main concern of everyone involved with any kind of exams – candidates, teachers, examiners, examination boards, and exams regulators. As a regulated exam board, we have a duty to do everything we can to maximise this reliability and accuracy. Moderation was first introduced in 2001 in response to concerns expressed at the time that examination results could be unreliable and unfair.

Regardless of how carefully we define what's being assessed or how thoroughly we train examiners, there will always be a certain degree of subjectivity in the judgements they make, and small differences in marking will occur. The purpose of moderation is to address these differences as far as possible and to maximise consistency so that results are more likely to reflect the standard actually demonstrated in the exam room, across different locations, between examiners, and over time.

With many kinds of assessment, for example where there are written exam scripts, this is achieved via double marking. However, because performance exams take place at one moment in time in front of one examiner and there is no reliable or practical method of re-creating or reviewing that occasion, such an approach is not feasible; therefore moderation of RAD exams is carried out on a statistical basis, drawing on a wide variety of evidence, in particular the analysis of complete exam 'tours' (one examiner examining a range of candidates, typically several hundred over several weeks) which provides enough information to be statistically significant.

It's important to understand that moderation does **not** single out individual candidates or centres for special treatment. Of course, the results of individual candidates and schools can vary over time, for a whole host of reasons.

Adjustments are made only where a consistent pattern of over- or under-marking is evident **across the whole tour**, which cannot reasonably be explained by a drop or increase in standard across all candidates; for example, where all candidates at a certain grade have dropped an average of 10 marks. It is for this reason that the common misconception that moderation means a school gets 'locked in' to a certain profile which can never change is wrong. However, moderation does not aim to remove any and all discrepancy of any kind: the examiner's professional judgement will always remain the basis for results issued.

Moderation decisions are made for each separate examination type/level and applied equally for *every* candidate taking that exam within particular mark ranges. For example, in respect of all candidates on the examiner's tour taking Grade 4, one of the following decisions might be applied:

(a)   all the marks awarded by the examiner stand

(b)   all candidates who received up to 49 marks are adjusted up by 3 marks

(c)   results for all candidates are adjusted upwards by 3 marks

In making adjustments to marks, the following principles are observed:

·   the rank order in which the examiner placed the candidates is not changed

·   all candidates on the same mark at the same grade or level are treated in the same way – adjustments are not specific to individual candidates.

Moderation can and does increase the likelihood of a fair and reliable mark for the majority of candidates, but it doesn't guarantee that every candidate or every centre has a 'perfect' result. There will always be a few disappointments, but hopefully not too many. And of course also a few pleasant surprises!

EXAMPLE

So how is it actually done?

Once the marks for all candidates on an examiner's tour are available, we run a series of quality assurance checks based on information and records that we have been building up over a number of years. These checks taken together provide a good indicator of whether the marking is appropriate.

This is not a fictional example, although obviously all identities have been disguised. All the figures relate to a real examination tour which took place in 2015. Hopefully a real example will help to illustrate why we use these procedures and exactly how they work.

So, we have an examiner – let's call her Leia Organa – who has recently completed an examination tour in the country of Tatooine. She examined a total of 460 candidates, with the following results:

% SNA	% Pass	% Merit	% Distinction
0	2.4	71.7	25.9

So, we have no candidates below the pass mark ('standard not achieved', or SNA) on this tour and 26% of candidates are awarded Distinction. At a first glance you might think that these results look fine, but until we look at what sort of results we would be expecting from Tatooine, we don't know whether this is normal or not. Over the years we have built up records of results for every country in which we examine, so we have a pretty good idea of what constitutes 'normal' for any given country. There were 5 examiners in Tatooine this year – here are the average results for the other 4 tours:

% SNA	% Pass	% Merit	% Distinction
0	2.0	50.3	47.7

As you will see, the 4 other examiners working in Tatooine this year gave some rather different looking results to Leia. Between them the 4 examiners saw over 2,000 candidates. Again, there are no SNAs, but the percentage of candidates awarded Distinction is much higher than on Leia's tour. So we certainly owe it to the candidates examined by Leia to probe a bit further into her tour.

There are two possible scenarios here – either the standard of the candidates examined by Leia was much lower than the average for Tatooine, or the examiner has been marking a little lower than normal. The first thing we can do to determine which of these scenarios is more likely to be correct is to look at the past results of all the candidates for each school examined by Leia, which are shown in the table below:

correct is to look at the past results of all the candidates for each school examined by Leia, which are shown in the table below:

	CURRENT YEAR			PREVIOUS YEAR			YEAR BEFORE THAT		
	Number of candidates	SNA %	Dist %	Number of candidates	SNA %	Dist %	Number of candidates	SNA %	Dist %
Yoda's Ballet School	41	0	7	29	0	31	29	0	45
Skywalkers	27	0	22	29	0	76	20	0	65
Dancing with Darth	28	0	50	104	0	42	110	0	55
Jedi School of Dance	155	0	29	167	0	65	178	0	68
Solo Dance Academy	16	0	0	16	0	13	28	0	11
Chewies Dance	114	0	47	128	0	52	112	0	62
Kenobi Kids	67	0	16	68	0	63	41	0	44
Jabba School of Ballet	28	0	25	31	0	45	29	0	45
Galaxy Dance Academy	28	0	18	30	0	70	35	0	51
Ceethreepies	26	0	15	38	0	66	50	0	28
The Force of Dance	22	0	23	15	0	40	24	0	42

Padme's School of Ballet	18	0	28	13	0	54	15	0	40
Millenium Dance	25	0	20				18	0	50
Death Stars Stage School	29	0	7	29	0	97	23	0	57
Sith Position	10	0	0						
Anakins	6	0	0						
ALL CANDIDATES	**640**	**0**	**26**	**697**	**0**	**57**	**712**	**0**	**54**

This table shows all the schools whose candidates were examined in this tour, with the number of candidates entered and the percentage awarded SNA and Distinction. To the right of the current year's information, you will see the same data for the previous 2 years that the school entered candidates (there are 2 schools entering candidates for the first time). There are 16 schools in all, and in all but one case you will see that Leia Organa's results are lower – in some cases very much lower – than those of previous years.

The most helpful line is the bottom one, which shows all the candidates on the tour and gives a pretty good idea of how the results compare to previous years. As we have already noted, most of the results show a similar trend, but there are always the odd ones that don't: the results at Dancing with Darth actually appear to be higher than last year, although it is important to note that the centre entered far fewer candidates this year, so we are not really comparing like with like. As we have already seen, one of the underlying principles of the whole process is that all candidates on the same mark at the same grade are treated the same, so it is not possible – and would not be right or fair – to give special treatment to individual candidates or centres; there may, after all, be good and valid reasons to account for why they do not conform to the general trend.

The information we have looked at so far is quite 'crude' in that it only shows the percentage of candidates awarded SNA and Distinction. It indicates that most of the schools where Leia examined have fewer Distinctions than in the past, but to be sure about whether or not this is a fair reflection of the standard actually demonstrated at those schools we need to focus on the actual marks and look more closely at the candidates and their past results. It is not possible within the confines of this document to look at all 460 candidates on this tour, so we will focus on one grade: Grade 2. The exercise would of course normally be repeated for each Grade and Vocational Graded level.

Below you will see all the Grade 2 candidates examined by Leia on this tour, with the marks from their 2 previous examinations next to them:

Candidate	Current exam		Previous exam			Previous exam to that			Difference (current exam to previous exam)
	GRADE	MARK	GRADE	DATE	MARK	GRADE	DATE	MARK	
Emily	2	52	1	24-Jul-14	64				-12
Beatrice	2	54							
Farrah	2	56							
Sarah	2	56							

Ava	2	56	1	15-Jul-14	46				+10
Emilia	2	57							
Brooke	2	57	1	24-Jul-14	62				-5
Luke	2	58							
Lily	2	58							
Celia	2	60							
Cassidy	2	60	1	12-Aug-14	68				-8
Jaimie	2	61							
Zoë	2	61							
Morgan	2	61	1	31-Jul-14	68				-7
Alicia	2	62							
Ella	2	62	1	07-Aug-14	66				-4
Ainsley	2	62							
Mia	2	62	1	29-Jul-14	69				-7

Leanne	2	62	1	01-Aug-14	80	Primary*	28-Jul-13	68	-18
Cindy	2	63							
Lucia	2	63	1	11-Aug-14	67				-4
Corinne	2	63	1	17-Jul-14	80	Primary*	28-Jul-13	67	-17
David	2	63							
Isabella	2	64							
Eve	2	64							
Alexandra	2	64	1	06-Aug-14	75	Primary*	09-Aug-13	76	-11
Tatum	2	64	1	17-Jul-14	62				+2
Melissa	2	64	1	16-Jul-14	75				-11
Sabrina	2	64							
Georgia	2	64	1	24-Jul-14	75				-11
Sophie	2	64	1	12-Aug-14	71				-7

Pia	2	65	1	17-Jul-14	73				-8
Beth	2	65							
Emma	2	65	1	24-Jul-14	76				-11
Anne	2	66							
Mackenzie	2	66	1	06-Aug-14	78	Primary*	09-Aug-13	79	-12
Rachel	2	66	1	11-Aug-14	77	Primary*	05-Aug-13	67	-11
Jessica	2	66	1	16-Jul-14	69	Primary*	16-Jul-13	77	-3
Bronwyn	2	66	1	18-Jul-14	71	Primary*	19-Jul-13	70	-5
Lucy	2	66	1	18-Aug-14	75				-9
Maria	2	67	1	06-Aug-14	81	Primary*	12-Aug-13	77	-14
Chloë	2	67	1	15-Jul-14	75	Primary*	15-Jul-13	75	-8
Katie	2	67							

Jasmine	2	67	1	17-Jul-14	87	Primary*	28-Jul-13	75	-20
Jade	2	68							
Erin	2	68	1	24-Jul-14	63				+5
Paris	2	68							
Cameron	2	69							
Phoebe	2	69							
Lauren	2	69	1	30-Jul-13	76				-7
Madeline	2	69							
Hailey	*2*	*70*	*1*	*18-Jul-14*	*92*				*-22*
Siobhan	2	70							
Olivia	2	71							
Stephanie	2	71	Primary	19-Jul-13	68				+3
Niamh	2	71	1	18-Jul-14	76	Primary*	19-Jul-13	78	-5
Daisy	2	72							

Brianna	2	72							
Caitlin	2	72	1	22-Aug-14	80				-8
Dakota	2	72							
Hannah	2	72	1	12-Aug-14	81				-9
Scarlett	2	73	1	06-Aug-14	83	Primary*	09-Aug-13	78	-10
Madison	2	73	1	14-Jul-14	72	Primary*	16-Jul-13	73	+1
Elise	2	73	1	29-Jul-14	83				-10
Courtney	2	73	1	30-Jul-13	69				+4
Summer	2	73	1	17-Jul-14	75	Primary*	28-Jul-13	73	-2
Shelley	2	74	1	07-Aug-14	75				-1

Charlotte	2	75							
Layla	2	75	1	31-Jul-13	68				+7
Abigail	2	75	1	18-Jul-14	73				+2
Savannah	2	76	1	06-Aug-14	81	Primary*	12-Aug-13	84	-5
Reese	2	76	1	15-Jul-14	75	Primary*	15-Jul-13	75	+1
Samuel	2	77	1	11-Aug-14	91	Primary*	05-Aug-13	87	-14
Harriet	2	77	1	18-Jul-14	88				-11
Amber	2	77	1	18-Jul-14	93	Primary*	17-Jul-13	87	-16
Kayleigh	2	77	1	18-Jul-14	82	Primary*	19-Jul-13	75	-5
Paige	2	77	1	17-Jul-14	88	Primary*	28-Jul-13	75	-11
Autumn	2	79	1	18-Jul-14	90	Primary*	18-Jul-13	82	-11

Desirée	2	82	1	18-Jul-14	89	Primary*	17-Jul-13	89	-7
Andrea	2	85	1	14-Jul-14	81				+4
Kennedy	2	86	1	18-Jul-14	92	Primary*	17-Jul-13	93	-6

*= Primary in Dance

There were 81 Grade 2 candidates on this tour, of whom 51 had previously taken Grade 1 (and 24 had taken Primary in Dance). For the others, Grade 2 was their first examination. The data relating to the current exams conducted by Leia are shown next to last year's exams and the year before that. The mark difference between Leia's results and the previous year's is shown in the far right hand column.

You can see that for 41 of the 51 candidates with a previous examination result, Leia Organa's marks are lower than last year – in many cases, considerably lower. Given that the candidates come from 16 different schools, this cannot easily be accounted for by external factors, such as a change of teacher, nor is it reasonable to conclude that it is co-incidental. The evidence here therefore points towards the conclusion that it is more likely to be the examiner's marking, than the fact that the candidates performed less well than those elsewhere in Tatooine, which accounts for the discrepancy. Of course, it could be the case that previous examining was on the high side, as well as or instead of Leia's examining being on the low side, although the fact that these candidates were examined by more than one examiner on previous occasions makes this less likely. But regardless of this, one of the objectives we have is to ensure that there is a measure of *consistency* between results.

Finally, we will look at the record of the examiner herself. With a panel of about 200 examiners it is essential that we have robust methods of standardising them – ensuring that they are all marking in the same way. We do this in a

number of ways. Examiners are required to take part in marking exercises on an ongoing basis; this may be in person at an examiners' seminar or online. In addition,

we have appointed a number of 'standardisation examiners' to sit in with each examiner for a day and second-mark all the candidates. The information that we glean from these activities is very useful when making decisions in the moderation process. In the case of Leia, the examiner who standardised her reported a tendency to be a little severe at times. This trend was also evident in an online standardisation exercise that was carried out earlier in the year.

So now everything is telling us that all is not quite as it should be with the results for this tour. We have noted that the overall results are considerably lower than the other examiners'; that there is nothing in the data provided by previous results to suggest that the candidates Leia examined were below average; and that the examiner who standardized Leia Organa thought she was sometimes marking a little severely. To be fair to all the candidates, we should therefore make an adjustment to the examiner's marks.

We do this by looking at each grade in turn. Usually, adjustments for all grades will be largely the same, but occasionally – for various reasons – this is not the case. If we look again at the candidates' marks above we can see that the average drop for Grade 2 is about 6 or 7 marks, but in practice the differences range from -1 to -22, and there are also a few cases – mostly towards the top of the mark range – where the marks have actually gone up. Looking more closely, we can see that most of the biggest discrepancies lie in the lower half of the mark range – in the 50s and 60s – and these marks will therefore need a slightly bigger adjustment than those in the top half of the mark range. So taking all the variations into consideration as far as we can, the adjustment we finally end up with is +5 for the lower part of the mark range, +4 for the middle part, and +3 for the upper part.

Because any adjustment decision is made in response to the profile of the whole tour, it will never appear to 'fit' every candidate perfectly; but nor should it. For example, candidate Ava (56) is already 10 marks higher than for her Grade 1 exam. But there may be all sorts of good and valid reasons for this: perhaps she was nervous in her first

examination, perhaps she wasn't feeling well, perhaps she has since started to enjoy ballet more, perhaps she has taken extra lessons, perhaps she has changed teachers – the possibilities are endless. We can only speculate of course, but the fact that her mark is already higher than last time is not a reason for not applying the adjustment to her. Given the data we have, Ava deserves the adjustment every bit as much as the others: not to apply it risks prejudicing her result.

Equally, candidate Hailey (70) will receive a mark which is still quite a lot lower than her Grade 1 mark, even after the adjustment. Again, there may be many reasons why she has performed much worse this time around: perhaps she has lost interest in ballet, perhaps she has missed lessons, perhaps she was nervous, perhaps she just had a bad day, perhaps the increased difficulty of the exam was too much for her, perhaps she has had an awkward growth spurt... But the important thing to remember is that Ava and Hailey (and a few other similar candidates) are the exception, not the rule, here. There are always going to be candidates like this on any tour. We quite often find that there are a few candidates, perhaps a whole school or two, who do not benefit from an adjustment, or do not benefit enough, but provided they are in the minority it would be quite unfair on all the other candidates to single them out for special treatment.

So here are the candidates' results now that they have been adjusted. The adjustment and the adjusted mark which each candidate will now receive are shown in the shaded columns.

Candidate	Current exam		Previous exam			Previous exam to that			Adjustment	Adjusted mark	Difference (current to previous)
	GRADE	MARK	GRADE	DATE	MARK	GRADE	DATE	MARK			

Emily	2	52	1	24-Jul-14	64				+5	57	-7
Beatrice	2	54							+5	59	
Farrah	2	56							+5	61	
Sarah	2	56							+5	61	
Ava	*2*	*56*	*1*	*15-Jul-14*	*46*				*+5*	*61*	*+15*
Emilia	2	57							+5	62	
Brooke	2	57	1	24-Jul-14	62				+5	62	0
Luke	2	58							+5	63	
Lily	2	58							+5	63	
Celia	2	60							+5	65	
Cassidy	2	60	1	12-Aug-14	68				+5	65	-3
Jaimie	2	61							+5	66	

Name											
Zoë	2	61							+5	66	
Morgan	2	61	1	31-Jul-14	68				+5	66	-2
Alicia	2	62							+5	67	
Ella	2	62	1	07-Aug-14	66				+5	67	+1
Ainsley	2	62							+5	67	
Mia	2	62	1	29-Jul-14	69				+5	67	-2
Leanne	2	62	1	01-Aug-14	80	Primary	28-Jul-13	68	+5	67	-13
Cindy	2	63							+5	68	
Lucia	2	63	1	11-Aug-14	67				+5	68	+1
Corinne	2	63	1	17-Jul-14	80	Primary	28-Jul-13	67	+5	68	-12
David	2	63							+5	68	
Isabella	2	64							+5	69	
Eve	2	64							+5	69	
Alexandra	2	64	1	06-Aug-14	75	Primary	09-Aug-13	76	+5	69	-6

Name											
Tatum	2	64	1	17-Jul-14	62				+5	69	+7
Melissa	2	64	1	16-Jul-14	75				+5	69	-6
Sabrina	2	64							+5	69	
Georgia	2	64	1	24-Jul-14	75				+5	69	-6
Sophie	2	64	1	12-Aug-14	71				+5	69	-2
Pia	2	65	1	17-Jul-14	73				+5	70	-3
Beth	2	65							+5	70	
Emma	2	65	1	24-Jul-14	76				+5	70	-6
Anne	2	66							+5	71	
Mackenzie	2	66	1	06-Aug-14	78	Primary	09-Aug-13	79	+5	71	-7
Rachel	2	66	1	11-Aug-14	77	Primary	05-Aug-13	67	+5	71	-6
Jessica	2	66	1	16-Jul-14	69	Primary	16-Jul-13	77	+5	71	+2

Bronwyn	2	66	1	18-Jul-14	71	Primary	19-Jul-13	70	+5	71	0
Lucy	2	66	1	18-Aug-14	75				+5	71	-4
Maria	2	67	1	06-Aug-14	81	Primary	12-Aug-13	77	+4	72	-9
Chloë	2	67	1	15-Jul-14	75	Primary	15-Jul-13	75	+4	72	-3
Katie	2	67							+4	72	
Jasmine	2	67	1	17-Jul-14	87	Primary	28-Jul-13	75	+4	72	-15
Jade	2	68							+4	72	
Erin	2	68	1	24-Jul-14	63				+4	72	+9
Paris	2	68							+4	72	
Cameron	2	69							+4	73	
Phoebe	2	69							+4	73	
Lauren	2	69	1	30-Jul-13	76				+4	73	-3

Madeline	2	69							+4	73	
Hailey	*2*	*70*	*1*	*18-Jul-14*	*92*				*+4*	*75*	*-17*
Siobhan	2	70							+4	75	
Olivia	2	71							+4	75	
Stephanie	2	71	Primary	19-Jul-13	68				+4	75	+7
Niamh	2	71	1	18-Jul-14	76	Primary	19-Jul-13	78	+4	75	-1
Daisy	2	72							+3	75	
Brianna	2	72							+3	75	
Caitlin	2	72	1	22-Aug-14	80				+3	75	-5
Dakota	2	72							+3	75	
Hannah	2	72	1	12-Aug-14	81				+3	75	-6
Scarlett	2	73	1	06-Aug-14	83	Primary	09-Aug-13	78	+3	76	-7
Madison	2	73	1	14-Jul-14	72	Primary	16-Jul-13	73	+3	76	+4

Name											
Elise	2	73	1	29-Jul-14	83				+3	76	-7
Courtney	2	73	1	30-Jul-13	69				+3	76	+7
Summer	2	73	1	17-Jul-14	75	Primary	28-Jul-13	73	+3	76	+1
Shelley	2	74	1	07-Aug-14	75				+3	77	+2
Charlotte	2	75							+3	78	
Layla	2	75	1	31-Jul-13	68				+3	78	+10
Abigail	2	75	1	18-Jul-14	73				+3	78	+5
Savannah	2	76	1	06-Aug-14	81	Primary	12-Aug-13	84	+3	79	-2
Reese	2	76	1	15-Jul-14	75	Primary	15-Jul-13	75	+3	79	+4
Samuel	2	77	1	11-Aug-14	91	Primary	05-Aug-13	87	+3	80	-11
Harriet	2	77	1	18-Jul-14	88				+3	80	-8

Amber	2	77	1	18-Jul-14	93	Primary	17-Jul-13	87	+3	80	-13
Kayleigh	2	77	1	18-Jul-14	82	Primary	19-Jul-13	75	+3	80	-2
Paige	2	77	1	17-Jul-14	88	Primary	28-Jul-13	75	+3	80	-8
Autumn	2	79	1	18-Jul-14	90	Primary	18-Jul-13	82	+3	82	-8
Desirée	2	82	1	18-Jul-14	89	Primary	17-Jul-13	89	+3	85	-4
Andrea	2	85	1	14-Jul-14	81				+3	88	+7
Kennedy	2	86	1	18-Jul-14	92	Primary	17-Jul-13	93	+3	89	-3

We can see that the largest of the discrepancies have now been significantly reduced. There are still a few candidates who will probably be disappointed with their marks, but they are very much in the minority. With the original marks, only 61% of candidates were within 10 marks of their previous exam; using the adjusted marks that figure has now risen to 84%, which we believe to be acceptable. We know, of course, that most teachers would like their candidates' marks to stay the same or go up, but given the varied personal circumstances of individual candidates a certain amount of fluctuation both up and down has to be expected.

Finally, if we compare the 'bottom line' of the first table we looked at, which showed the results of the 16 centres on this tour, we can see that the percentage of candidates awarded Distinction is much more in line with the previous two years once the adjustment to this and the other grades has been made.

RESULTS BEFORE ADJUSTMENT

	CURRENT YEAR			PREVIOUS YEAR			YEAR BEFORE THAT		
	Number of candidates	SNA %	Dist %	Number of candidates	SNA %	Dist %	Number of candidates	SNA %	Dist %
ALL CANDIDATES	640	0	26	697	0	57	712	0	54

RESULTS AFTER ADJUSTMENT

	CURRENT YEAR			PREVIOUS YEAR			YEAR BEFORE THAT		
	Number of candidates	SNA %	Dist %	Number of candidates	SNA %	Dist %	Number of candidates	SNA %	Dist %
ALL CANDIDATES	640	0	52	697	0	57	712	0	54

We hope that this example helps to explain how and why examination results are moderated.