User manual

Jumpian

Software manual

Status 14.07.2015

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1. Mark

1.1. Subdivision in groups and areas

The mark management of Jumpian provides a possibility to divide subjects into individual groups and areas, which then can be weighted differently. Thus, you maintain a great overview of your students' marks, even over different categories. You can additionally adjust the calculation of marks individual. If you created a new subject in Jumpian, no areas are created by default and „Grouping areas" is deactivated, which means, there are also no groups.

You have now the opportunity to only work with areas, which are assigned to single works or to group single areas. This means, that you can create groups, which will be assigned to areas.

1.1.1 Subdivision in groups

In order to subdivide your areas, open in Settings "Manage mark- /subject".

A window will open with setting for managing marks. Here you will see a on the right site a window "Areas is 'Subject'". In order to add a new area, go to „Add". A field appears, where you can enter the name of the area. Add all desired areas for the corresponding subject.

Now you have the option to weight the areas differently for mark calculation. Click on the field in the last column of the according area and choose a number for the desired weighting (by default weighting is 1)

You can weight the individual areas differently. That means that you can set for every area an own weighting (by default weighting is 1). If you do not weight the area, all areas are invoiced with the same weighting. "Weighting Areas" is activated by placing the tick mark in the Drop-Down Menu under options at the corresponding position.
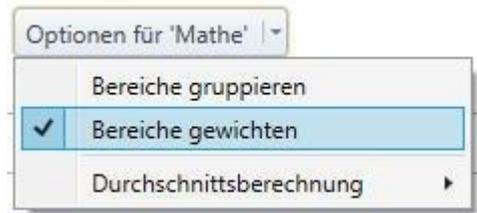
How the calculation of the total mark with subdivided areas works can you read here.

Now you need to assign the individual works to areas. Double click on a specific work and select the desired area. Repeat this until all works are assigned to an area.

WARNING! If you already entered a work and added afterwards areas and/or groups, you need to assign the work to groups and/or areas in order to guarantee the correct calculation of the total average.

1.1.2 Grouping of areas

If you like to group your areas, place a tick mark at settings for mark managing "Grouping areas".
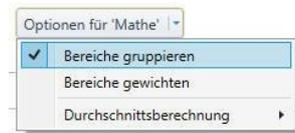
Now two new columns appear "Group" and "Weighting".

In order to add a new group, click simply at an area, which should be added to the group, in the column group and type the name of the group. The group is saved and other areas can be assigned to it.
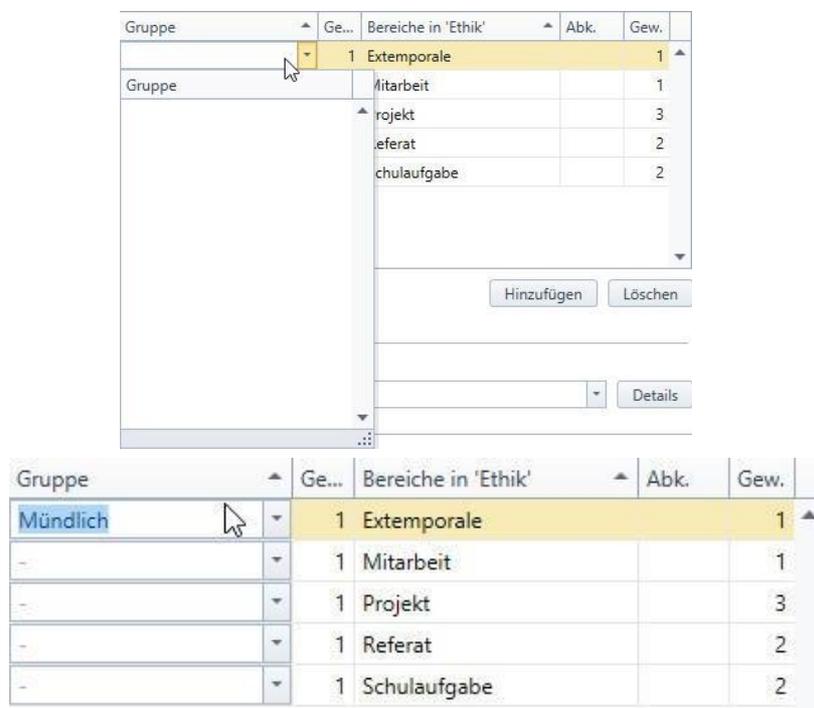
If you like to assign an area to an already existing group, you just need to select in the Drop-Down Menu the column group.
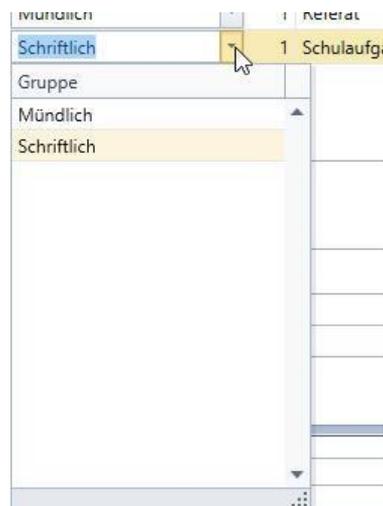
In order to adjust the weighting of a group, just enter the weighting in the second column at any desired area of the group. This change is applied and also displayed for other areas in that group.

How the calculation of the total mark with subdivided areas works can you read here.

WARNING! If you already entered a work and added afterwards areas and/or groups, you need to assign the work to groups and/or areas in order to guarantee the correct calculation of the total average.

1.2.   Average calculation of the total mark

In Jumpian exists the option to subdivide your subjects in to groups and areas and weighting these differently in order to provide the desired calculation of marks.

1.2.1   Berechnung ohne Gruppen und ohne Bereiche

If you deactivated „Grouping areas" and no areas exists, the calculation is only based on individual works and its weighting. Please note that as soon as an area in subject is created, every work needs to be assigned to a specific area. In order to calculate the mark without any categorization you need to delete the created area.

Pfortner, Lisa

Datum	Arbeit	Bereich	Note	Bemerkung
08.01.2015	Mitarbeit		2	
08.01.2015	Referat [2]		1	
08.01.2015	Projektarbeit [3]		2	
08.01.2015	2. Extemporale		4	
04.11.2014	1. Extemporale		3	

The subject ethic is in this example in no group or a area subdivided. The work "Presentation" is double-weighted and the work „Project" is weighted three times..

Jumpian calculates the total mark as average of the individual works (ratings of works according to the weighting)

1.2.2 Calculation without grouped areas

If you do not like to group your subject, remove the tick mark at "Grouping Areas" under Manage Marks-/Subject management.
Even if the grouping of the subject is not set, it is still possible to create individual areas and to weight them differently.

How to subdivide your subject into areas, manage the areas and weight them, can you read here.

We explain the calculation of the mark using the following example:
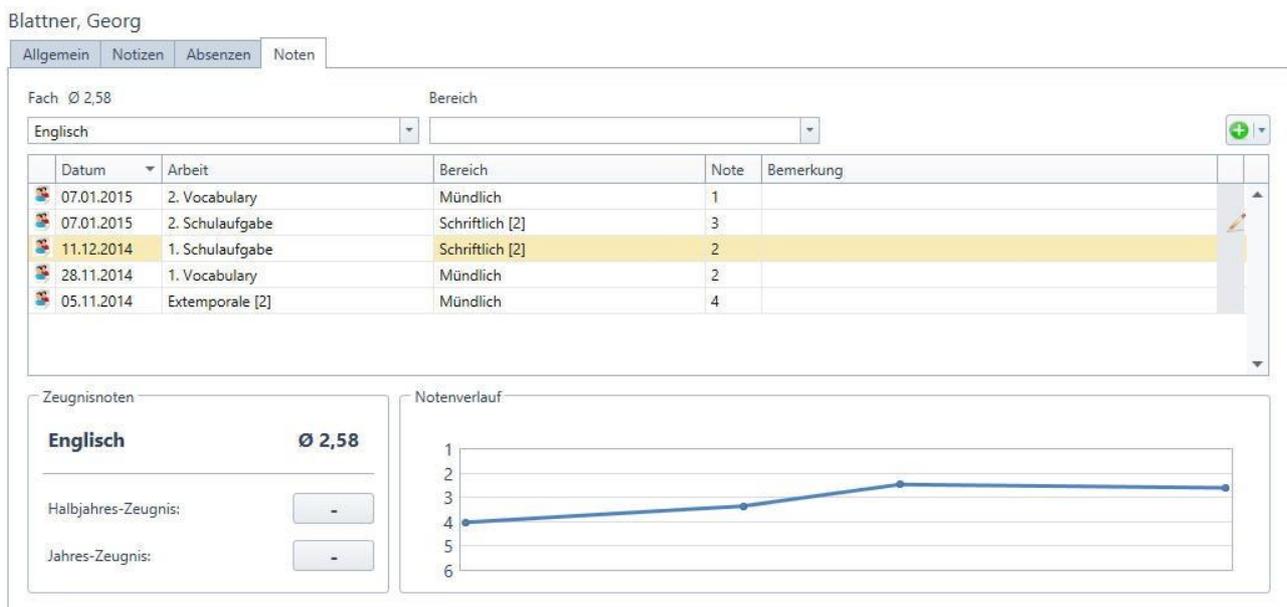
The subject English is divided into two areas: "Oral" and "Written". The Area "Written" is double-weighted. Moreover the work „Test" is in its area double-weighted. If a work or group is weighted multiple times, you can recognize that at the number in the squared brackets.

Jumpian calculates the average mark as follows:

1. It calculates the average mark of the individual areas as average of the single works within an area (Ratings of works according to the weighting)
2. It calculates the total mark as average of individual areas (Ratings of groups according to the weighting)

Work	Mark	x Weighting	/ Number of weighted works		= Average Area	x Weighted	/ Number of weighted areas	Average Group	x Weighted	/ Number of weighted groups

1. Dictate — Weighting: 1 — Mark **4** — x1

2. Dictate — Weighting: 1 — Mark **3** — x1

+ =7 / 2 = **Dictate 3,5** Weighting: 1 — x 1

Test 04 — Weighting: 1 — Mark **2** — x1

Test 05 — Weighting: 2 — Mark **3** — x2

+ =8 / 3 = **Essay 2,66** Weighting: 2 — x 2

+ = 8,82 / 3 = **Writing 2,94** Weighting: 2 — x 2

Test 02 — Weighting: 1 — Mark **3** — x1

Test 03 — Weighting: 2 — Mark **4** — x2

+ =11 / 3 = **Reading aloud 3,66** Weighting: 1 — x 1

Test 01 — Weighting: 1 — Mark **1** — x1

+ =1 / 1 = **Reading test 1,0** Weighting: 2 — x 2

+ = 5,66 / 3 = **Reading 1,89** Weighting: 1 — x 1

/ 3 = **Average Total mark 2,6**

1.2.3 Calculation with grouped areas
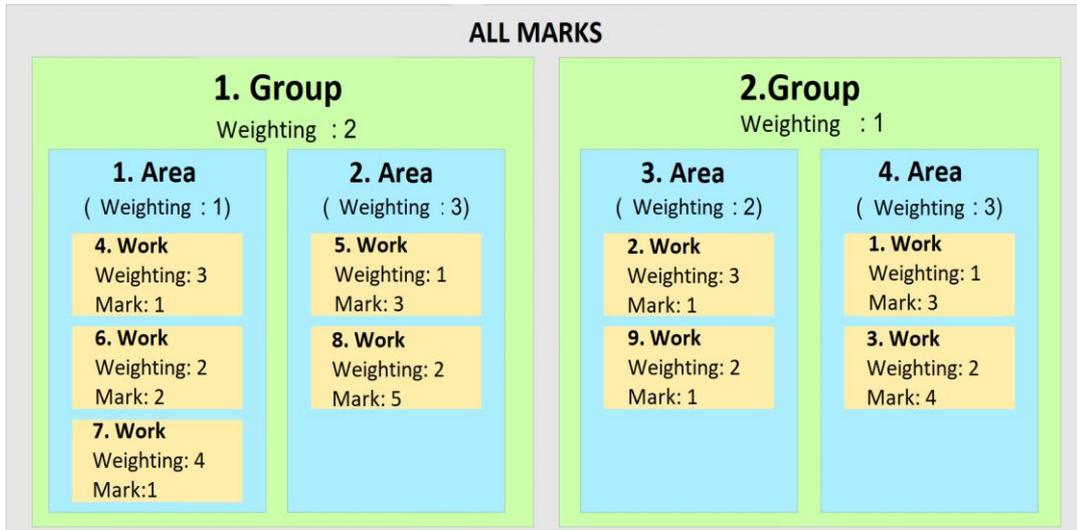
If you work with grouped areas, your marks are consequently divided in areas and groups. That means that every work is subdivided in an area and a group. Therefore, it exists multiple options to calculate your report mark: You can select under average calculation, if you like to include your groups and/or areas. If this is the case, intermediate averages are calculated for individual groups or areas, which are invoiced accordingly to their weightings. Otherwise weightings of groups/areas are invoiced, but no intermediate averages are used. All works are lumped together. You can set under options for the corresponding subjects in the settings for mark management, if you like to include areas/group. The weighting of individual works, areas and groups are displayed in the mark overview of the individual students in squared brackets.

For a better distinction we summarized all the single calculation opportunities here. The specific opportunities are described in detail in the following.

For our calculation examples the following applies: (Mark x Weighting) / Number of Weightings
N: *Mark;* **G:** *Weighting;* **Yellow:** *Work;* **Blue:** *Area;* **Green:** *Group;* **Grey:** *Total mark*

Settings	Type of calculation	Example	Mark
☑ Include groups ☑ Include areas	In this case the intermediate averages for the areas are calculated at first. From these calculations the averages of groups are determined. After that the total mark is calculated. The intermediate average and works are calculated corresponding to their weightings.	**Averages of areas:** 1. Area: **1,222** 3. Area: **1,25** 2. Area: **4,333** 4. Area: **3,666** **Averages of groups:** 1. Group: ((1,222x1)+(4,333x3)) / (1+3)= **3,555** 2. Group: ((1,25x2)+(3,666x3)) / (2+3) = **2,7** Total average: ((3,555x2)+(2,7x1)) / (2+1)= **3,270**	3,270
☐ Include groups ☐ Include areas	Calculations of the average mark from the average mark of all individual works. This means that until there is no final average mark, intermediate average marks are not calculated. Every single mark is multiplied with their own weighting and the weighting of the superior areas. The products are totalled up. In the end the sum of all work are divided by its weighting and the weighting of its groups and areas..	**Summed products of marks and weightings:** (1x4x1x2)+(2x2x1x2)+(1x3x1x2)+(5x2x3x2)+(3x1x3x2) +(2x1x2x1)+(1x3x2x1)+(4x2x3x1)+(3x1x3x1)= **143** **Summed products of weighting:** (4x1x2)+(2x1x2)+(3x1x2)+(2x3x2)+(1x3x2)+(1x2x1)+ (3x2x1)+(2x3x1)+(1x3x1)= **53** **143 / 53 = 2,698**	2,698
☐ Include groups ☑ Include areas	The average mark is calculated from averages of all areas. First, average marks for every single area are calculated corresponding to the weighting of the individual works. Second, area average marks are multiplied and totalled up with their own weighting and the superior weighting. At the end, the sum of the areas are multiplied with ther own weighting and the superior weighting.	**Average marks of areas:** 1. Area: ((1x4)+(2x2)+(1x3)) / (4+2+3) = **1,222** 2. Area: ((5x2)+(3x1))/(2+1) = **4,333** 3. Area: ((2x1)+(1x3))/(1+3)= **1,25** 4. Area: ((4x2)+(3x1))/(2+1)= **3,666** **Sum of areas x Weighting x Weighting of groups:** (1,222x1x2)+(4,333x3x2)+(1,25x2x1)+ (3,666x3x1) =**41,94** **Wighted sum of aras x groups:** (1x2)+(3x2)+(2x1)+(3x1) = **13** **41,94 / 13 = 3,226**	3,226
☑ Include groups ☐ Include areas	The total average mark is determined by the averages of the group. Instead of calculating intermediate averages for areas, group averages from all individual works are calculated corresponding to their weighting and the weighting of superior groups. The group average is added in the end, multiplied by the number of groups and divided by their weighting.	**Average marks of the group:** 1. Group: ((1x4x1)+(2x2x1)+(1x3x1)+(5x2x3)+(3x1x3)) / ((4x1)+(2x1)+(3x1)+(2x3)+(1x3))= 50 / 18 = **2.777** 2. Group: (2x1x2x1)+(1x3x2x1)+(4x2x3x1)+(3x1x3x1) / (1x2)+(3x2)+(2x3)+(1x3) = 43 / 17 = **2,529** Total average: ((2.777x2)+(2,529x1)) / (1+2) = **2,695**	2,695
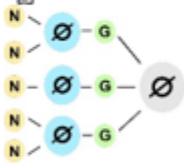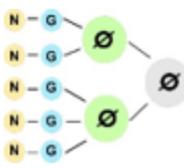
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Please note that we calculated with values that are rounded to three decimal places after the interim calculation for a clearer understanding of the example. This is obviously not the case for calculation in Jumpian.

1.2.3.1 Inclusion of groups and areas

This calculation option occurs, if you activated under average calculation "Include groups" and "Include areas". This means that a intermediate average is calculated at first for areas and then for groups according to their assigned works and weightings.

First of all, the average for every area is created. Therefore, the average mark of works, which is assigned to the corresponding area, is calculated regarding the weighting of works. Afterwards the averages of individual groups are formed from averages of the groups. The average total mark is finally calculated with the averages of the group, taking the weighting again into account.

Work	Mark	x Weighted Work	/Number of weighted works	= Average area	x Weighted Area	/Number of weighted areas	Average Group	x Weighted Group	/Number of weighted groups
1. Work Weighting: 3	1	x3							
2. Work Weighting: 2	2	+ =11 (=1x3 +2x2 +1x4)	/ 9 (=3+2+4)	= 1. Area 1,22 Weighting: 1	x 1				
3. Work Weighting: 4	1	+ x4					1. Group 3,55 Weighting : 2	x 2	
					+ = 14,21 (=1,22x1 +4,33x3)	/4 (=1+3) =			
4. Work Weighting:1	3	x1							
5. Work Weighting: 2	5	+ =13 (=3x1 +5x2) x2	/ 3 (=1+2)	= 2. Area 4,33 Weighting: 3	x 3				
								+ =9,8 (=3,55x2 +2,70x1)	/3 (=2+1) =
6. Work Weighting: 3	1	x3							
7. Work Weighting: 1	2	+ =5 (=1x3 +2x1) x1	/ 4 (=3+1)	= 3. Area 1,25 Weighting: 2	x 2				
					+ = 13,48 (=1,25x2 +3,66x3)	/5 (=2+3) =	2.Group 2,70 Weighting : 1	x 1	
8. Work Weighting: 1	3	x1							
	4	+ =11 (=3x1 +4x2) x2	/ 3 (=1+2)	= 4. Area 3,66 Weighting: 3	x 3				

Durchschnittliche Gesamtnote

3,27

No inclusion of groups and areas

In this version, intermediate averages are not calculated for individual groups and areas. The average total mark is determined directly from all marks, but the weighting of the single groups, areas and works are considered. This occurs if you deactivated „Including areas" and „Including groups". The mark of every work is multiplied with the weighting of the area and the group it is assigned to. Afterwards the products are summed up and divided by the product sum of the weighting in order to get the average total mark. In order to get the product sum of the weighting, the weighting of every single work with its weighting of the corresponding areas and the according group is multiplied. These products are totaled up.

Work	Mark	x Weighting Work	x Weighting Area	x Weighting Group	= Product sum of marks and weighting		x Weighting Work	x Weighting Area	x Weighting Group	= Product sum of weightings		
1. Work Weighting: 3	1	x3	x1	x2	=6		x 3	x 1	x 2	=6		
					+					+		
2. Work Weighting: 2	2	x2	x1	x2	=8		x 2	x 1	x 2	=4		
					+					+		
3. Work Weighting: 4	1	x4	x1	x2	=8		x 4	x 1	x 2	=8		
					+					+		
4. Work Weighting: 1	3	x1	x3	x2	=18		x 1	x 3	x 2	=6		
					+					+		
5. Work Weighting: 2	5	x2	x3	x2	=60	=143	x 2	x 3	x 2	=12	=53	
					+					+		
6. Work Weighting: 3	1	x3	x2	x1	=6		x 3	x 2	x 1	=6		
					+					+		
7. Work Weighting: 1	2	x1	x2	x1	=4		x 1	x 2	x 1	=2		
					+					+		
8. Work Weighting: 1	3	x1	x3	x1	=9		x 1	x 3	x 1	=3		
					+					+		
9. Work Weighting: 2	4	x2	x3	x1	=24		x 2	x 3	x 1	=6		

/

Average Total mark

2,698

(=143/53)

=

1.2.3.3 **Only include areas**

If you set your average calculation so that only areas are included, but no groups, the average mark is calculated as follows: Firstly, the intermediate average for every area is determined, which is the result of the corresponding area, marks and its weighting. Afterwards the average total mark is calculated from the intermediate averages of the areas. The weighting of the corresponding group is considered.

Work	Mark	x Weighting Work	/ Number of weighted works	= Average Area	x Weighting Area	x Weighting Group	= Product sum of area averages and weightings	x Weighting Area	x Weighting Group	= Product sum of weightings
1. Work Weighting: 3	1	x3								
2. Work Weighting: 2	2	+ x2 =11 (=1x3 +2x2	/ 9 (=3+2+4)	=	x 1	x 2	=2,44	x 1	x 2	=2
3. Work Weighting: 4	1	+ x4 +1x4)								
4. Work Weighting: 1	3	x1								
5. Work Weighting: 2	5	+ x2 =13 (=3x1 +5x2)	/ 3 (=1+2)	=	x 3	x 2	=25,98	x 3	x 2	=6
6. Work Weighting: 3	1	x3								
7. Work Weighting: 1	2	+ x1 =5 (=1x3 +2x1)	/ 4 (=3+1)	=	x 2	x 1	=2,5	x 2	x 1	=2
8. Work Weighting: 1	3	x1								
9. Work Weighting: 2	4	+ x2 =11 (=3x1 +4x2)	/ 3 (=1+2)	=	x 3	x 1	=10,98	x 3	x 1	=3

+ =41,9 / + =13 =

Average Total Mark

3,223

(=41,9/13)

1.2.3.4 **Only include groups**

This kind of average calculation occurs, if "Including groups" is selected in the settings, but not "Including areas". For this calculation method no intermediate averages for areas are formed, only intermediate averages for groups, which are used to calculate the total mark. The averages of groups are calculated by all corresponding marks, their weightings and the weightings of according areas.

Work	Mark	x Weighting Work	x Weighting Area	= Product sum of marks and weightings	/	x Weighting Work	x Weighting Area	= Product sum of marks and weighting	Average Group	x Weighting Group	/Number of weighted groups
1. Work Weighting: 3	1	x3	x1	=3		x3	x1	=3			
				+				+			
2. Work Weighting: 2	2	x2	x1	=4		x2	x1	=2			
				+				+			
3. Work Weighting: 4	1	x4	x1	=4		x4	x1	=4	1. Group 2,778 Weighting: 2	x 2	
				+ =50 /				+ =18 =			
4. Work Weighting: 1	3	x1	x3	=9		x1	x3	=3	(=50/18)		
				+				+			
5. Work Weighting: 2	5	x2	x3	=30		x2	x3	=6			
6. Work Weighting: 3	1	x3	x2	=6		x3	x2	=6			
				+				+			
7. Work Weighting: 1	2	x1	x2	=4		x1	x2	=2	2. Group 2,529 Weighting: 1	x 1	
				+ =43 /				+ =17 =			
8. Work Weighting: 1	3	x1	x3	=9		x1	x3	=3	(=43/17)		
				+				+			
9. Work Weighting: 2	4	x2	x3	=24		x2	x3	=6			

+ =8,085 (=2,778x2 +2,529x1) /3 (=2+1) = **Average Total mark 2,695**

1.3. Weighting and separation of half-year periods

In Jumpian you can view calculation of year report marks separated by half-year periods and, if you desire, even weight them differently. This means that the report mark of the first half-year period and the average mark of the second half-year period are calculated. These are invoiced (according to their weightings) afterwards.

WARNING! The REPORT MARK of the first half year and the AVERAGE MARK of the second half-year period are used. This is based on the fact that are normally no report marks for the second half-year period.
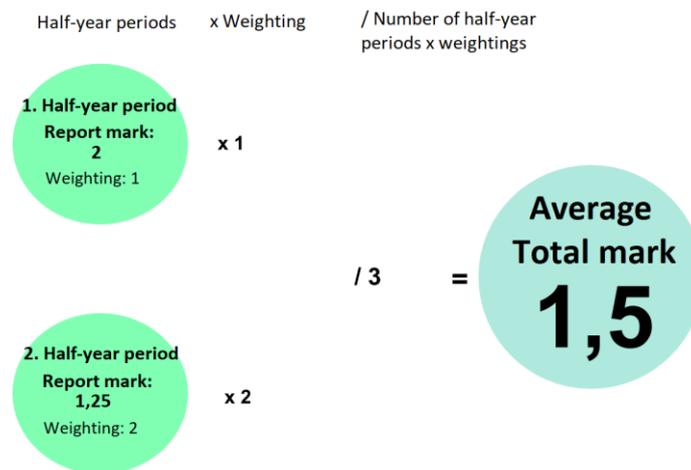
In order to view the half-year periods separately, open the window for year report mark calculation of the corresponding subject under "Settings for mark management" -> "Option for [subject]" -> "Calculation of report marks…" and select "View half-year period separately". If you like to weight the half-year periods differently, you can adjust this here. Select „Default ", if you wish that all marks/groups/areas are taking into account for the year report mark. This is option is selected by default.