



Step-by-Step explanation of SPARK for academics

1. Academic determines if group learning and assessment tasks necessary to achieve learning outcomes
2. Academic identifies weighting for group assessment project/task and key assessment criteria for marking the group submission
3. Academic explains how group marks are adjusted into individual marks using SPARK and method for formulating groups
4. Academic develops assessment criteria and rating scale to be used calculating the adjustment factor, in collaboration with students and after considering past student feedback
5. Academics arranges for subject and student details to be entered into SPARK to enable online student access
6. Academic monitors groups during completion of group task
7. Academic collects and assesses group projects/tasks
8. Academic communicates group project mark to each group
9. Academic consults SPARK for adjustment factors and applies to group mark
10. Academic provides each individual student with summative feedback (i.e. the adjusted individual mark)
11. Academic may provide each individual student with formative feedback
12. Academic evaluates effectiveness

SPARK weighting factors

1. **SAPA (Self Assessment to Peer Assessment factor)** is the ratio of a student's own rating of themselves compared to the average rating of their contribution by their peers. This has strong feedback value for future development both for self-critical reflection and peer evaluation.

$$\text{SAPA Factor} = \sqrt{\frac{\text{Self ratings for individual team member}}{\text{Average of ratings for individual by peer team members}}}$$

It provides students with feedback about how the rest of the team perceives their contribution unsullied by their own opinion.

For example, a SAPA factor greater than 1 means that a student has rated their own team performance higher than they were rated by their team peers.



Conversely, a SAPA factor less than 1 means that a student has rated their own performance lower than they were rated by their peers.

This is particularly useful for individual team members to know how they are going and whether any changes are needed. Time in class to discuss these SAPA factors assists with the feedback process.

- 2. SPA (Self and Peer Assessment factor)** is a weighting factor that can be used to change a team mark for a project (stage) into an individual mark as well as provide feedback on relative contribution.

$$\text{SPA Factor} = \sqrt{\frac{\text{Total ratings for individual team member}}{\text{Average of total ratings for all team members}}}$$

Calculating the individual student mark using SPARK factors

The student's adjusted mark = team mark / Individual's SPA

For example, if a team's project mark was 80% and one team member receives a SPA factor of 0.9 would receive an individual mark of 72 to reflect a lower than average team contribution as perceived by a combination of themselves and their peers. An alternate formative or development use can be helpful even if no assessment applies.

In order to discourage free riders, some lecturers may decide that students who fail to complete their ratings of each member's contribution receive ZERO marks.