

Karen:

I think I get why you want to minimize the number of categories you set up when establishing the modes that you want to use. I'm going to try to explain my understanding below, and in so doing hopefully help clarify how the modal analysis part of the program works. At the same time it will let me ask you a question or two about what, if my understanding of the way that things work here is correct, could lead to some weird erratic results or strange things going on if one or two marks are changed slightly. **Very true.....this is why teachers still need to view their results....definitely early on in the program because only a few marks in one category can get messy.** I'm also passing this along to Hugh as, for me at least, the last little bit of explanation you did really clarified a lot of things and I found it very useful. So here goes...

As you indicated the calculation of the mode is determined by setting up a set of categories...lets keep it simple and use level 1, 2, 3, and 4, with marks corresponding to the achievement charts. As a weight is set up, and a mark is entered, the range for that mark is determined (what modal category it belongs to is determined) and then that modal category has a total value assigned to it incremented by the weight that has been assigned for the mark (the last bit's a little turgid but work with me....I'm an arts major—I'm not supposed to know these things): **Yes that is correct so far.**

Thus, for instance, here are five marks and the weighting that has been assigned to these marks: 8/10, 7/10, 5/10, 5/10 and 7/10 (using the /10 thing again to keep things simple). These marks have been weighted 10, 10, 11,11,13 respectively. Because the first mark is a level 4 then the level four bin (whatever var is used by the program) is incremented by 10

Level 1	Level 2	Level 3	Level 4
			10

Because the second mark is a level 3 then the level 3 bin is incremented by 10 also

Level 1	Level 2	Level 3	Level 4
		10	10

The third mark is a level 1 but is given a weight of 11...

Level 1	Level 2	Level 3	Level 4
11		10	10

The fourth is a level 1 so...

Level 1	Level 2	Level 3	Level 4
11 11		10	10

And the fifth is a level 3...so

Level 1	Level 2	Level 3	Level 4
11		10	10
11		13	

In this case the weighted modal analysis yields a level three as level 3 has a total of 23 of the weighting points assigned to it. **Correct!**

What's interesting here is that if the student has gotten one mark less on the latter assignment he would go from a level 3 to a level 1 because the thirteen shown in the level 3 column above would now pop into the level 2 category, which means that in terms of the highest # of mode points, the student would now have those two whopping big 11s in his or her level 1 column...so he or she gets a level 1. **True! One mark can make all the difference. Plus if there is a tie....then the student gets the higher of the two levels.**

### Questions:

W/r/t the number of categories you set up...setting up a lot of categories increases the likelihood of the sort of erratic behaviour described above as, if there are fifteen categories, and fifteen marks assigned, a slight variation in one mark could really change things dramatically....i.e. the fact that there are two reasonably weighted marks in the 1++ category could overshadow the fact that there is one mark similarly weighted in each of the level 3, 3+, 3++, 4-, and 4 categories: even though the kid is coming up with mostly threes and fours, he got a couple of marks in the level 1++ bin...so for this strand or category....that's what this person gets. Is this correct? **Yes – you've got it!**

Of course this would be mitigated somewhat as the student will hopefully do a little better in the other categories or strands...which is also an argument in favour of making sure that you provide thoroughly stranded marks, i.e. the more marks that you have in the program, the less likely it is that you will end up with this sort of anomaly; or if you do get this sort of thing going on, it will hopefully only happen in one category and the remaining categories would provide a sort of buffer as they would hopefully have something that is more reflexive of the kids real performance...unless, again, there are too many categories used and, again, anything could happen. **This is why it is still important for teachers to review their marks. However, if we are doing fewer evaluations for each unit....but richer...covering more categories....there will be enough marks, but revision of the overall mark per category must be reviewed.**

And finally the “blended” part just means that if you have four categories that you are using here or strands or whatever, and each of these strands/categories is weighted in a way that they add up to 100% (I'm an arts major remember...95 is close okay...what a retard!!), then the final marks is determined by doing a weighted average of the four modally determined marks. **Yes!**

Did I get it? If I've gotten this sorted out then we've solved the big mystery...and we just have to sort out how to comply with Fresh AER...this was the thing that was driving me nuts. If you could get back to me and tell me if I'm in the ballpark at least I'd really appreciate it. **Excellent! You've got it!**

And again, thanks for the help: we both really appreciate it.

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