

“Two marks for invalid questions not the way to go” (Charis Mun, ST Forum, 13/10, pH7)

I REFER to the apology from the Singapore Examinations and Assessment Board for a mistake in a question in this year's PSLE mathematics paper, and particularly the decision to award two marks to all pupils, irrespective of their responses.

I disagree with the approach. As the PSLE is a placement exam, with the aim of determining the achievement level of each pupil relative to his peers, it is the T-Score and not the raw score that matters.

The approach taken by the board would penalise those pupils who could solve the problem, as the answer can be worked out using the given data though it is mathematically not possible to draw such a figure.

As this is a multiple-choice question with a very straightforward solution (flip triangle B over to form a triangle with base 15cm and height 6cm, then subtract the given areas for triangles A and B to arrive at the answer), I do not believe any of the pupils would have ventured to work out the dimensions of the rectangle and the areas of the two triangles, and discovered the inconsistencies, thereby finding difficulty with the question.

Those who are unable to get this question correct are more likely to be those who would not be able to do it even if the dimensions are correct, and are unfairly given a two-mark advantage.

The additional marks should be awarded only in borderline cases for the purpose of enabling a pupil to qualify for a course, not for ranking purposes.

Contrary to comments in news reports, not many find the maths paper difficult. The only problem was insufficient time rather than inability to solve the problems. A lot of time was taken up doing computation as calculators were not allowed for the exam.

To accurately assess the ability of each pupil, I would suggest that mathematical concepts/understanding and problem-solving ability be tested separately from computation ability (which is of less consequence in the real world, given the easy availability of calculators), and calculators be allowed in the former so that time could be spent thinking of solutions rather than on computation.

There should be a way to differentiate pupils of different abilities - those who can think of solutions quickly, those who can solve the problems but need a little more time and those who simply haven't got a clue.

Surely, the child who can solve a problem given a little more time deserves to be ranked above the one who couldn't, no matter how much time he is given.

Perhaps the time taken to complete the paper should also be a factor in grading. Additional time may be allowed but less marks awarded, thus differentiating the better pupils from the average ones, and the average pupils from the weaker ones.

The time allowed for the PSLE papers should also be reviewed. For example, the English paper this year was much easier than expected and quite a number of pupils completed the 1 hour 50 minute paper in less than an hour. This makes differentiating the better pupils difficult.

I would also like to call upon the Ministry of Education to fully explain the mechanics of the computation of the Transformed Score or T-Score. The method of computation, as explained, is based on the mean and standard deviation for each subject.

Based on the formula given, it seems that each subject may carry different weightage (not equal weightage as informed) as a pupil scoring full marks in a subject with low mean and narrow spread would have a higher T-Score, compared to another who scored full marks in a subject with a higher mean and wider spread.

While this is not wrong as different subjects have different levels of difficulty, the question of relative weightage for the subjects has to be addressed.

A pupil strong in one subject may be disadvantaged by an easy paper where others who are weaker in the subject do almost as well.

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