

REFLECTIONS

It was almost exactly a year ago when I last contributed to 'Reflections' and attempted to make MT readers more aware of the educational debate that was raging in the north of Ireland. What to do about the eleven plus was the question, which resulted in much debate, consultation, the setting up of a review body and eventually a working party to consider all of the results. Good old fashioned political stuff, really.

At long last the government has published the recommendations of the aforementioned working party, findings that have been accepted in full. The eleven plus and any form of academic selection will be abolished in 2008. Parents will have the right to choose the school that best suits their children's needs, aptitudes, interests and aspirations. Primary schools will keep pupil profiles to help in those choices, but they will not be used as a tool to aid selection pupils. All schools, yes even grammar schools, will have to operate a new Entitlement Framework, which will provide a wide range of academic and vocational courses. From age 11 students will follow a broad and balanced curriculum and at 14 they will choose an academic pathway, a vocational route or a mixture of both. It's just a pity that a further five year groups of our children have to endure the present educational discrimination.

My objections to the tests are not restricted to the iniquity of selection on academic lines at the age of eleven but also involve a study of the type of questions asked. Here is a small sample to give you an idea.

- Write the missing number $52 \times 258 = 156 \times _$.
- Write the answer. $17.4 - 5.93 = _$.
- What is $\frac{5}{6}$ of 54kg?
- The time is 21 minutes to 11 at night. Write this time in the 24 hour format.

Hardly the stuff to create total enthusiasm for mathematics in the minds of our young.

Thankfully the articles in *MT186* describe the teaching of mathematics as a much more mouth-watering prospect. **Rob Percival** compares a 'progressive' teaching style with a more formal 'framework' method. He makes the point that even though the progressive style takes a much longer amount of time to prepare, the students were being constantly challenged, forced to articulate their methods and to think mathematically. In addition he implies that the teacher also needs to become an investigator. **Ray Huntley** describes a 1980's video clip of a BBC *Horizon* programme in which teachers were encouraged to let children develop their own methods. Revolutionary for that time? **Margaret**

Jones is delighted by the fact that teaching fractions with a counting stick not only allows children to understand more clearly but also prompts them to move forward beyond expectations. **Susan Saunders, Julie Plumpstead, Katie Blood** and **Vicky Brinkley** relate how teaching in an Education Action Zone school can be both difficult and challenging. Quite often, because of this, various agencies offer well-meaning support in order to help raise the attainment of these pupils, which sometimes makes the teachers feel somehow deficient, like it's their fault the children are not reaching the national average.

Andrew Blair talks about the difficulties students have in choosing the best methods for tackling investigative work. He believes that problem-solving activities should be accessible to students but just beyond the comfort zone of their knowledge.

Geoff Giles concludes that Fermat quite clearly believed that finding results was of greater importance than proving them. Geoff believes that individuals should be given direct access to mathematical ideas and theories and then be charged with the responsibility for believing them to be true. He continues to give us plenty of food for thought by investigating Pascal's triangle in depth. **George**

Gadanidis also talks about giving children the opportunity to personally make sense of situations, not to be judged for making incorrect assumptions and not simply be given the correct answer. He quotes Ginsberg, who suggests that, although mathematics is big children's minds are bigger. **Sarah Holmes** looks at mathematical representations and the difficulties pupils sometimes have in interpreting them. She concludes that 'a representation is only as powerful as what it says to you.' **Helen Drury** writes about the difficulties that arise when planning to teach on a one-to-one basis. She discovered that it is important students realise that when difficulties are faced and overcome, real knowledge results.

Heather McLeay and **Peter Cromwell** get together to write about the notion that investigating 'prime' polyhedra might provide interesting classroom experiences. The result is an informative, thought provoking and colourful article.

I leave you with a quote from the reviews section, 'My job is to lecture and yours is to listen. Let me know if you finish first!' More 11+ than *MT186*, eh?

Robin Stewart is an editor of Mathematics Teaching.



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