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Welcome to **ATTACK!** a two-page occasional publication. Most of **ATTACK!** will be concerned with the holistic curriculum which, if acted on, is a fundamental way to undermine the present undemocratic education system. Don't be discouraged if opportunities to teach holistically are limited, do your best, be a guardian, and act as a witness to this culturally significant and inspiring way of teaching and learning. **ATTACK!** is a partner to <https://networkkonnet.wordpress.com>

Holistic mathematics Part 1

Under managerialism (the *Tomorrow's Schools'* period), no curriculum initiative has succeeded, and none will succeed. For a time, managerialist structures might prop up the initiative, hiding the extent of any failure, but to no ultimate avail. How could any curriculum initiative succeed given the curriculum knowledge, or lack of it, of those in control of the education system? How could it succeed given that the group whose task it is to put it into practice – that is teachers – is excluded from its development on the grounds of self-interest?

This brings this sad story to the nub: any curriculum initiative, for instance, the numeracy project, comes loaded with unworkable and undesirable features. The only way it could have been made to work was if teachers felt free enough to colonise it, but teachers did not feel free enough to colonise it, are not freed enough to colonise it. Under managerialism, it is not teachers who colonise curriculum initiatives (and the curriculum generally for that matter), but the ministry and education review office.

My reasons why I think numeracy is on the slide:

- The common practice of cross-grouping, cutting maths off from the rest of the class programme
- The resentment by children of cross-grouping
- The heavy emphasis on grouping in the first place
- The way children in the top group receive a better deal than children in the other groups, thus making ability grouping a self-fulfilling placement of children
- The way grouping and cross-grouping impede relating maths to real life applications
- The teaching becoming routine because of a lack of attention to problem solving
- A sense of teachers not being sufficiently on top of things to be able to provide cohesion – not being able to go backward (to concepts taken) and forward (to concepts to be taken) in mathematical references
- Numeracy strategies being used in heavy-handed manner
- The lack of integration of numeracy with curriculum maths
- A severe drop in lively discussion – time pressures, you see
- The use of unmediated, downloaded teaching units
- The need for more ancillary aide help (the recent review office criticism of the use of teacher aides can be interpreted as providing support for the government policy of cutting back on funding for them)
- National standards.

The opposite of all these will serve to lead to the holistic.

Dan Murphy principal of Winchester School has stood out against the tide and has carved a niche for his school to run an holistic mathematics programme.



Dan, in a letter to me, said:

I view the numeracy programme as good teacher in-service largely because primary teachers generally have a poor grasp of mathematics and need some guidance. As for it being a teaching programme for children, I think it misses the mark badly. It creates what I call an 'excluding curriculum' in that like the old multi-level maths programmes (and Vince Wright was behind those as well), children are grouped according to achievement of rather trivial objectives (jigsaw-puzzle approach). Unfortunately, they don't move on until they have achieved particular objectives, meaning many finish primary school without having covered even half the intended material and they certainly never make satisfactory mathematical connections. It is a recipe for failure.

At Winchester School we have abolished ability grouping and following the levels and stages of the numeracy project in favour of working on rich mathematical activities and in meaningful contexts. We call this the 'big picture' approach where making connections between mathematical ideas occurs. We have recently worked with Charles Lovitt from Melbourne, famous for the MCTP books and other such work in Australia. More importantly, the approach we have taken with maths is a model for good teaching in other curriculum areas. I mean, can you imagine having science broken into levels and stages and putting children into ability groups for it? It is unimaginable and yet we will let programmes like numeracy destroy good maths teaching. Ability grouping guarantees the lower achieving children are labelled forever.

To set up the maths programme, the following is the first letter Dan sent to parents:

The following article is part of a series published to help you understand the deliberate approach we are taking at Winchester School to teach children meaningful and memorable mathematics.

Introduction

Children need to engage in mathematics that is purposeful to create meaning.

Article 1

During the holidays, all teachers participated in mathematics training. We are going to be trialling different ideas between now and the end of the year to make mathematics more appealing to children, to give them more successful experiences.

When teachers have low expectations for students they respond by teaching them low-level mathematics. This is the reason why ability grouping in schools is not allowed in many countries, including Finland, the country that topped the world in the latest international achievement tests. Researchers in England found 88% of children placed into ability groups at age 4 remain in the same groupings until they leave school.

All the research and messages we have been hearing demonstrate that using ability groupings to teach children is a recipe for failure. Children learn mathematics by engaging in meaningful activities, by talking, by reasoning, and explaining their thinking. Placing children in ability groups tends to restrict their progress and limit their learning.

We are trying to avoid making mathematics a bitsy process that impedes children putting together the big picture. When there is a problem to be solved, one of the lovely things about mathematics is, by using different levels of mathematics, it can be accessible to all ages.

This week's problem:

- Suzie and Tommie went to the ice-cream shop. There were five flavours to choose from: apricot, banana, caramel, dark chocolate, and elderberry.
- What different double scoop ice creams could they have ordered?
- Talk about what things you could do to solve this problem. Let children try different ideas even if they don't work.
- Look for the answer and some strategies in next week's newsletter.

The above is a different way, the holistic way, and surely a better way. It doesn't have to be exactly the way set out, of course, but in not being, is in itself, the holistic way.

