

POSTER POWER

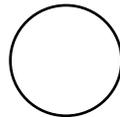
What does fun look like? We tell children mathematics is fun and a world of adventure to explore then present them with a simple white page to work with. There are many ways for children to engage in learning and experiencing mathematics and posters are one of them. From my observation of many classrooms the most common mathematical poster to be seen was the faithful multiplication times-tables. This article's purpose is to encourage the use of effective posters and other visual aides in the classroom to support learning and show some of the fun, exciting depth of mathematics that occurs in the real world. The use of posters to display and challenge appears to be an untapped resource. This area has great potential to engage children. Considering the percentages of learning occurring through each of the senses supports the old saying 'a picture is worth a thousand words'.

Learning through the senses

(Sobanski, 2002, p. 2)

Taste	3%
Smell	3%
Touch	6%
Sound	13%
Sight	75%

For example, which presentation gives a clearer impression of the meaning of circle, the visual representation or the definition?



A circle is the set of all coplanar points that are all an equal distance from a specific point.

Visual images and posters have the potential to show an overview of a mathematical idea or concept as well as portray simple detail and links to the real world (Kahn, 2001, pp. 23–28).

Posters can be used to increase learning opportunities. Learning opportunities can be described as moments when students are observing, discriminating, classifying, interpreting, recalling, organising, problem solving, imagining, evaluating, questioning, estimating, comparing and hypothesising (Education Department of South Australia, 1977, p.21). This can all occur in front of a poster. But not just any poster, posters should have a purpose and have meaning to the students.

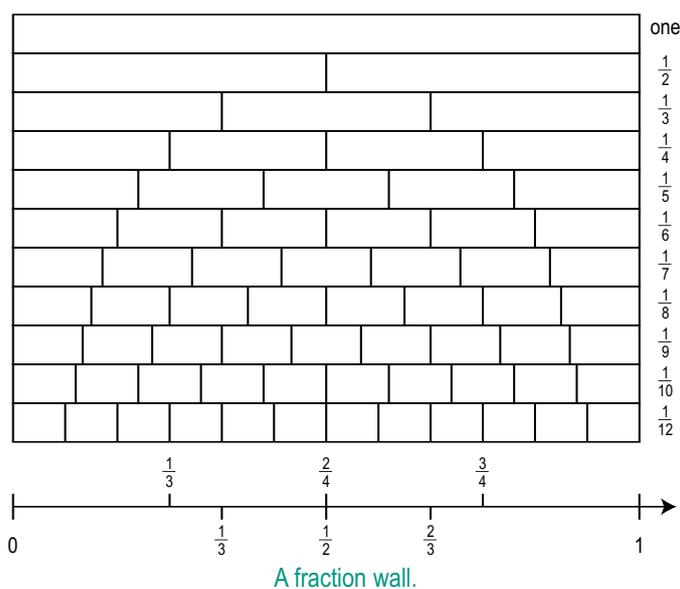
new VOICES

DAWN BAYLEY

**suggests some reasons
for including posters
in our classroom
mathematics activities.**

Making connections

Posters with images that relate to formal mathematics and the real world can portray simple aspects and overall concepts (Kahn, p. 30). Effective posters are those that scaffold the students learning. This means integrating what the students know and challenging them further. Posters can be used to confirm prior learning and to remind students of past work and concepts they have learnt. This may include using posters for displaying definitions or formulas. Posters can show how this learning connects to another area of mathematics; for example, a *fraction wall* (Gough, 1998).



A fraction wall can be done in a number of ways. By creating a numbers line 0 to 1 and displaying the fractions $\frac{1}{2}$ and $\frac{2}{4}$ in the middle and continuing to break the line down into sections. Students can add fractions as they discover them or create visual examples of the fraction and place on the huge poster. This resource can continue to show students the connections with fractions, percentage and decimals. This poster is very interactive. Most posters can encourage students to recall information and discuss with teachers and other students what they see and understand. Posters can also be used to introduce new areas and start class discussions.

Posters can make maths look fun

Through using colour and characters on posters students can be motivated and drawn into learning opportunities. Displaying mathematics with bright colour encourages students' motivation and using colour helps students to recall information because it stimulates the right side of the brain

(Sobanski, 2002, p. 4). Teachers can use this to expose students to many areas of mathematics and link mathematics with other learning areas such as art and science.

Where do these posters come from?

There are no excuses with our present day technology. Posters can be printed from the Internet, created on the computer with a variety of programs and, of course, the students or teachers can create some. Giving the students the opportunity to understand and represent a mathematical idea, concept or problem is an excellent strategy for teachers to use in assessing students. These posters could be simple, displaying shape families, places to find pattern or recreating pattern, or shapes with labels. Posters could also be used to show how to problem solve, what questions to think of or real life examples of using algebra. The possibilities are endless. The power of mathematical posters should not be underestimated. It is a small addition to the classroom that can make a difference to students' attitudes towards mathematics.

In conclusion, why should we make mathematics look good using a variety of mathematical posters? Posters are:

- a reflection of the value and depth of mathematics and that it is more than just the multiplication tables;
- a resource that can be utilised to show students the connection within mathematics and the links with the real world;
- a wonderful way to motivate and engage students in learning opportunities;
- opportunities to make mathematics look fun.

For your first step in using effective posters in your classroom please venture into resource below.

References

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- Gough, J. (1998). Fraction walls. *Prime Number*, 3 (4), 30–31.
- Kahn, P. (2001). *Studying Mathematics and its Applications*. New York: Palgrave.
- Sobanski, J. (2002). *Visual Math — See How Maths Makes Sense*. New York: Learning Express.

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