

2013 臺灣國際科學展覽會 優勝作品專輯(國外作品)

作品編號	130006
參展科別	行為與社會科學科
作品名稱	Does colour improve your memory in math ?
得獎獎項	四等獎

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ABSTRACT OF EXHIBIT

TAIWAN INTERNATIONAL SCIENCE FAIR

The main **purpose** of this investigation was to determine whether colour could improve children's memory skills in maths, so that better school results could be achieved. A secondary reason for doing the investigation was to try and improve the standard of maths education by coming up with two new mathematical methods, that incorporate colour and feeling, to help the students understand their maths sums and therefore improve their marks.

The hypothesis is that colour does improve young children's mathematical memory, and will therefore improve their maths marks.

Procedure

To prove the hypothesis, various maths tests were devised, using the investigators novel method, these were administered to foundation phase classes. Thirty students were selected from grade one, grade two, and grade three, from a developed and an under resourced school, to write the tests. The testing took place over two days, where on the first day, half the class received a test printed in black and white, and the other half received the same test printed in colour. On the second day the students that had already received a black and white test on the first day, received a colour test, and the half that received a coloured test, received a black and white test. These tests were compared to those used by the students' teachers. Once the tests were written the investigator assessed all of them and recorded the results which were averaged as shown below.

Data

Graphs were plotted to represent the results of the coloured printing tests, and the black and white tests – for each grade. There was a significant difference in the results of colour vs. black and white.

Results from the developed school:

% shown indicates the marks that the children obtained.

GRADE	COLOUR	B/W	%DIFFERENCE
1	86%	76%	10%
2	74%	62%	12%
3	63%	60%	3%

Results from the less-economically developed school:

% shown indicates the marks that the children obtained.

GRADE	COLOUR	B/W	%DIFFERENCE
1	83%	76%	7%
2	63%	57%	6%
3	63%	50%	13%

Conclusion

Colour does indeed improve memory skills of grade 1-3 students, which will therefore improve their maths results.

評語

An interesting and creative research, but there are not enough evidences to support that colour can improve one's memory in learning Math. And if the researcher can use various combinations of colours, the results will be more interesting.