



The mathematics of classrooms
With application to teaching.

Fredrik Usk (fredusk@meii.com)
Mathematics Education and Innovation Institute and Usk Inc.

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1 Introduction

This article is an overview of recent ground breaking research within the field of Mathematics Teaching. A number of books have been consulted in preparing this text and it is our great pleasure to reveal this knowledge to the world in a more compact and accessible format.

The work carried out by these studies is a novel approach to teaching the subject of Mathematics and has shown to be effective for 99% of all test subject and give an additional benefit of the HSHM (higher score higher motivation) ratio. This double ratio increase is unique for this method.

1.1 Mathematics Education and Innovation Institute

The Mathematics Education and Innovation Institute is a nonprofit organization concerned with the development of Teaching methods in Mathematics and the proliferation of student creativity for the good of future peoples through innovation and development. They organize the annual *Responsible Teaching and Creative Learning Seminars* (www.respondteach.nu) and publish the monthly journal *Journal of Mathematics Teachers for Open Perspectives* (www.jounmathperspectives.se).

2 Literature review

The massive support for the Open Perspectives method of mathematics teaching after the publication of the works [2, 3] has been well documented in studies (see for instance [1]). Here will follow a summary of the Open Perspectives method starting with the theoretical foundations of the method.

2.1 Theoretical background

Without going in to the formal mathematical derivations (for reasons of brevity - see [3] for details) we can state that it is a well documented quantum mechanical fact that there is a randomness to the most fundamental building blocks (particles) of this world. Their motions as well as their existence is determined by chance circumstance by means of the wave equation distribution.

This fact in combination with recent findings concerning the energy field equations governing the electromagnetic wave equation distribution surrounding a neuron axon extension makes it clear that this may act like

a "loaded dice" in regards to mere particles and their much weaker field distributions. By examining said axons the findings of [3] are remarkable. The study could conclude to a confidence degree of 99.9% that the special properties of the human brain makes it possible for it to mold the distributions of the world to its advantage.

2.1.1 Application to mathematics teaching

Being the highest standing subject due to its major demands on student ability and intelligence if mastery is to be achieved the effects of the use of Open Perspectives method is most prominent in this discipline. Open Perspective uses the probability perturbation abilities of the learner in order to optimize the learning and give a feeling of enjoyment and sense of personal achievement.

Over the course of a three week training period the students were taught how to utilize the incredible potential of the Open Perspectives method in order for them to be able to effectively and reliably learn the abstract concepts of mathematics and the results reported by [2] are presented in the next part of this paper.

3 Results

As the number of students reached a critical mass, to assure the accuracy of this results, a pattern began to take form in which one could clearly see the huge benefits of the Open Perspectives method. As you can see even the students who started off scoring lowest on the conceptualization tests (see [2] for details) reached a totally different level after their training.

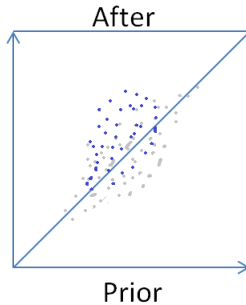


Figure 1: The effects of Open Perspectives method on student learning

4 Discussion

Throughout history there has been attempts at explanations of how subject matter is learnt and methods of teaching based on these attempts. What is lacking in previous works is the empirical and physical perspectives offered by the studies [1, 2, 3]. Finally we have arrived at a fuller and more complex understanding of how subjects are learnt and a far superior method of teaching is thereby based on it.

5 Conclusions

The authors work studied in this literature review is far superior to any other in the field or in related fields and it is highly recommended that the method of Open Perspectives should be implemented by more mathematics teachers.

References

- [1] Martin Edlöpare. *How do we know what we learn*. Usk Inc., Stockholm, 2010.
- [2] Fredrik Usk. *The advantage of Open Perspectives methods in the Mathematics Classroom*. Usk Inc., Stockholm, 2003.
- [3] Fredrik Usk. *On the probabilistic nature of Neuron Affinitive Energy Distributions*. Usk Inc., Stockholm, 2009.