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## INTERVIEW WITH

Parents World discusses how Unit Transfer Method (UTM) with author of the book, "Unit Transfer Method In Solving Challenging Upper Primary Mathematical Problems" can help students and parents to solve challenging maths problems involving rate and speed.

## What inspires you to author the UTM book?

Personally. I had observed and experience many challenges and frustrations during my years as a mathematics teacher.

The current primary Mathematics syllabus is very different from what today's parents and teachers were raised on. During my teaching years, heuristics has been directly incorporated into the syllabus and not neatly contained in dedicated chapters but integrated into the regular curriculum. It is difficult to isolate and learn. This may even make mathematics confusing for

Many parents find it difficult to put aside the regular-syllabus mathematical concepts we were brought up on and to re-learn heuristics, much less teach our own children this new concept.

Take Algebraic Equations for example. Many parents, being familiar with the topic, will attempt to teach their children to solve the question using algebraic equations, not realising the use of algebraic equation is not recommended in primary syllabus. Many a times, parents end up confusing our child.

Many desperate parents depend on tuition agencies or private tutors for their children's Mathematics performance, not realising that most tutors were also raised on the same Mathematics syllabus as themselves and not trained in heuristics.

The more hands-on parents rely on guidebooks to equip themselves to personally guide their children. However, I have observed there are no books on the market that specifically teaches Mathematical Heuristics. Where aguide book comes close to it, it's title merely allude to Mathematical strategies (not Mathematical Heuristics), making such books difficult to identify.

Recognising the frustrations and challenges that teachers, parents and students face in applying heuristics in solving mathematical problems are what provided me the impetus this book. A guide book that delivers!

## Q Are there any challenges or difficulties in writing this book?

As this book is meant for parents, I have to understand readers' psyche and the time crunch parents face. The objective of this book is not just an assessment or guidebook to provide only answers or brief workings but to carefully illustrate each step involved in the workings, so readers will not end up having to figure out for themselves how the author got from one step to another.

Challenging Maths problems these Q Challenging Maths problems these days are making parents and children shiver at the thought of it. We heard you do conduct classes for Heuristics. How are the classes conducted?

To help children master problem solving heuristics, we have developed our programme into four comprehensive training modules. Unit Transfer Method is the first module.

Students will be trained how to select the most effective and efficient heuristics to solve math problems. Most important, in each training modules we emphasis on a systematic approach to build a child's confidence and motivate them to be

confident problem solvers. I always believe that the pupil's self esteem is increased when they experience the satisfaction, pleasure, fun and thrill of discovery with problem solving heuristics. This will translate to academic improvement.

Many students have shown miracle Many students have shown in the breakthrough after your training. A former CHIJ girl had improved from 52% to 99% in her prelim and A\* in PSLE within 20 weeks. Can you share your secrets with us?

I have always tell my parents, there is no secrets or miracles in Maths. Our curriculum is designed based on Bloom's taxonomy, which is a basis of Higher Order Thinking Skills. Higher Order thinking is a complex combination of lower skills and higher level skills. The lower level skills are knowledge, comprehension and application. The higher order skills include analysis, synthesis and evaluation. Hence for a child's results to escalate, he or she must be trained to surpass beyond the first three basic levels to the higher levels. This is what our training programme aims to achieve

Q Sunny, can you share with us some highlights of your upcoming publication?

Speed & Rate is one of the most challenging PSLE topics that even stunned the most intelligent pupils and educators. Thus, my next publication will be focusing on application of Advanced Unit Transfer Method to solve Challenging problems involving Speed and Rate.