



Developing  
**Problem Solving**  
in the work place

*Another boring course ???!*

**No it's fun!**

**and very effective**

Never do a calculation before you know the answer.  
– Prof. John “black hole” Wheeler.

If we give you a boat, a lamp and a day out to the beach at Sentosa,  
How can you find out the size of the earth using your old friend Pythagoras!

How many **HAIRS** do you have on your head?

If we *lock* this room airtight, how long can we *breathe* ?

If the **whole world** comes to Singapore, *does everyone have space to stand?*

*Which is more profitable for the government: GST or cigarette tax?*

*How much money does McDonalds on your corner make?*

*And how about your own company?*

**A course designed for Singapore-based companies.  
building on existing strengths we develop new ones:**  
initiative . leadership . communication . critical thinking

## Promoting Efficiency and Cost Reduction in your Business

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*Implementing the IB Diploma in your school* <http://dp-help.com>  
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#### To deliver, we adopt an advanced educational strategy

Singapore's workforce, like any workforce, has both strengths and weaknesses. The greatest strength is a virtually unparalleled ability to absorb and adopt change. The most frequently cited weaknesses are: lack of initiative and problem solving skills; lack of critical and creative thinking skills; and lack of leadership, communication and sharing skills.

To strengthen these skills, we employ modern advanced educational insights: identify a *known strength* and a *focused learning objective* to build the self-confidence needed to empower people to work on their weaker skills.

#### What strength and learning objective do we select, and why?

Singapore's workforce is exceptionally well-versed in numerical skills (the strength), which is a great basis from which to develop *estimation* skills (the focused objective). Since estimation problems are non-threatening and fun, they ensure active participant engagement, key to a successful workshop. The first quote on the previous page (by one of last century's great scientists, Prof. Wheeler) further shows that estimation is both *challenging* and *essential*, even to the world's best minds. What's true for science is true for business. As our workshop will demonstrate, estimation by itself is a vital business skill for strategic planning, saving costs, and maximizing profits. In addition, working on estimation problems automatically develops the core skills mentioned above, and hence promotes business efficiency.

#### How do estimation skills address the core skills?

Estimation problems are done in groups and discussed in public and thus develop teamwork, communication and presentation skills. They demonstrate there's many different ways of obtaining a 'right' answer, and thus encourage independent individual initiative and creative thinking. Learning to quickly mine and combine personal knowledge and relevant internet data promotes research skills, critical and holistic thinking, and problem solving efficiency.

In short, estimation provides a powerful step towards the delivery of self-reliant and efficient thinkers/communicators. First steps are often hardest, and so it is in this case: further steps are now easily made.

#### How do we begin?

Easy. Start with an introductory workshop of 2 hours, at your premises.  
Extend to a customized in-house or out-station course to achieve full benefit.

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