

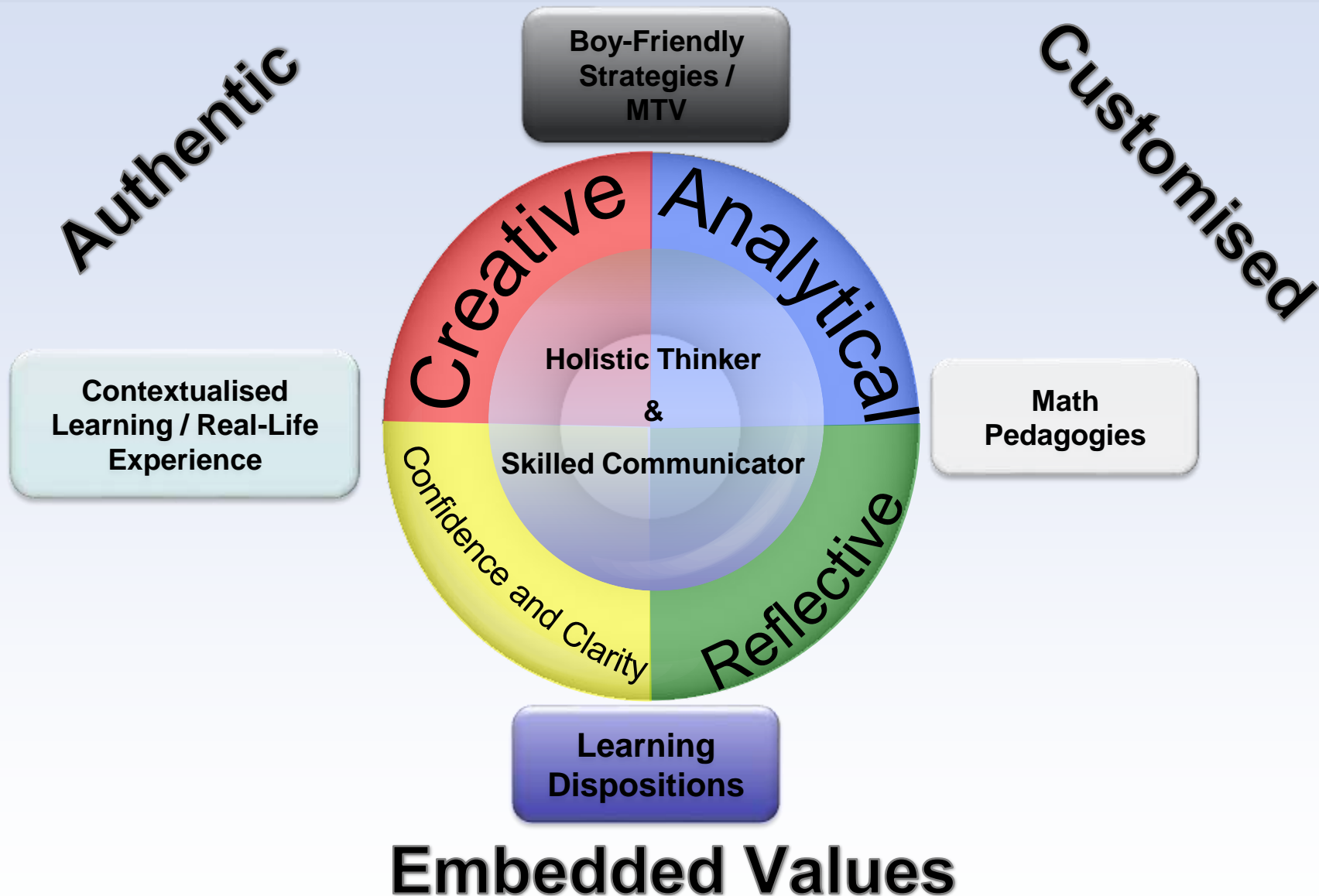
Nurturing a Holistic Thinker and Skilled Communicator in Mathematics



Every Saint an Analytical, Self-directed problem-solver by acquiring thinking, reasoning, communication, application and metacognitive skills.



Our Math Department Vision
Every Saint is an analytical, self-directed problem-solver



SAJS

Signature Pedagogy



Teaching understanding of concepts through 3 representations

E

Enactive

- Provide learning experiences through the use of concrete materials, manipulatives or hands-on activities.

P

Pictorial

- Provide learning experiences with the use of visual medium : pictures, diagram, images, videos, etc to allow pupils to generate mathematical rules and regulations through questioning.

A

Abstract

- Provide learning experiences for identification and application of problem-solving skills and strategies, as well as the explanation of concepts, giving examples and non-examples and justification for specific rules and solutions.



SAJS Problem-Solving Approach

- To promote cognitive and metacognitive process skills (HT skills) when applying problem-solving skills / heuristics



SAJS Problem Solving Approach

1

- **Read and Understand**

- Have I used **Structured Questioning** ?
- Have I used **chunking** to identify key information?
- Can I restate the problem by drawing a picture or diagram to help me understand the problem?

2

- **PLAN**

- What **strategy or heuristics** can I use to solve the problem? **What makes you say that?**

3

- **Carry out the Plan**

- Did I label my steps?
- Did I use the right mathematical symbols?
- If I am stuck, do I have an **alternative method**? **What makes you say that?**

4

- **Check**

- Does the answer make sense?
- Have I **check** for reasonableness and accuracy? (**Confirm**)
- Have I checked for calculation errors?
- Have I checked for transfer errors?
- Have I transferred information correctly?
- Have I included the correct measurement units?



Learning Dispositions

The disposition to :

- Persevere (Resilience)
- Be adventurous (Wonder)
- Make connections (Wonder)
- Be accurate (Excellence)
- Seek and evaluate reasons (Wonder)
- Have metacognition (Self-Discipline & Excellence)



Format of PSLE Math

Paper	Item Type	No. of Questions	Marks per qns	Weightage	Duration / Paper weightage
Paper 1 Booklet A	MCQ	10	1	10%	1 h (45%)
		5	2	10%	
Paper 1 Booklet B	Short-answer	5	1	5%	
		10	2	20%	
Paper 2	Short-answer	5	2	10%	1h 30min (55%)
	Structured Long answer	12	3,4,5	45%	

Note: No Calculators are allowed for Paper 1



P5 Topics

P5 SA1 Topics	P5 SA2 Topics
Whole Numbers	Decimals
Order of Operations	Rate (NEW)
Fractions	Percentage (NEW)
Area of Triangle (NEW)	Average (NEW)
Volume (NEW)	Geometry (NEW)
Ratio (NEW)	Area & Perimeter
Area & Perimeter	



Materials Used in Class

- Targeting Math TB 5A and 5B
- Targeting Math Workbook 5A and 5B
- Termly Heuristics Booklets
- Practice Papers
- **Blue file** – Maths Workbook
- **Purple file** – Heuristics booklets, test/exam papers



Key Areas of Focus

- Involvement / Participation in Learning –
 - Cooperative Learning
 - Mathematical Reasoning
 - Use of MTV Thinking Routines in classroom
 - Asking questions to seek clarity
- Problem-Solving using Heuristics
 - Checking for reasonableness and accuracy
 - Use of Alternative Solutions
 - Creating Questions
 - Identifying Misconception
- Math Journaling
(Think and Take notes)



Ways we hope to partner you

Rigor

- Ensure daily practice
- Check their PO and class website
- Get child to explain concepts to you
(encourage mathematical reasoning)



Ways we hope to partner you

Presentation of Work (Neat and Organised)

- Ensure that there are proper steps and equations
- Ensure **proper filing** of Worksheets
- Ensure **corrections are complete**



Ways we hope to partner you

- Develop and prepare them the following skills
 - Time Management
 - Exam-taking skills
 - Accuracy
 - Mental Calculation
- **Responsible use** of the calculator (higher weightage on paper 1 compared to previous format)



THANK YOU

