OYEA NOTEWORTHY PRACTICE

EMPOWERING HIGH-NEEDS STUDENTS THROUGH 'PROJECT CHRYSALIS'

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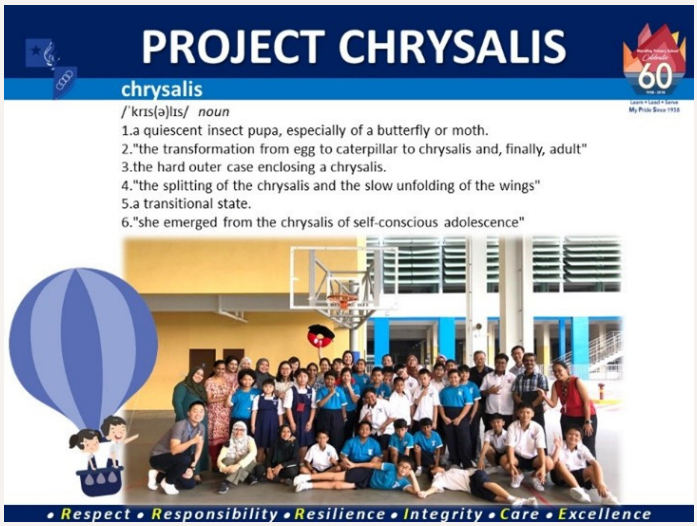
ABOUT THE PROGRAMME

Project Chrysalis (PC) is an ongoing after-school engagement programme designed to build personal empowerment in Marsiling Primary School's identified high-needs students (HNS), and to develop their academic and socio-emotional skills. Formerly known as 'Home Away from Home' from 2015 to 2018, PC has evolved from a simple after-school activity to a holistic curriculum and ASEP for HNS. PC adopts a LAMPS approach:

- **L**ife skills and interest-based skills acquisition
- **A**cademic coaching and homework supervision
- **M**entoring by a significant person and through positive role-modelling
- **P**artnership with parents, external agencies and the community to hone Socio-Emotional skills.

Firstly, the school identifies HNS based on their risk factors so they could be placed in PC for intervention and support. The programme is customised to the identified students' needs and interests. Close partnership with stakeholders, staff and community partners was required to strengthen protective factors and in supporting the needs and development of the students.

PC runs thrice weekly during term time and is conducted for about a week each time during the month-long school holidays as a form of school holiday engagement programme.



*Chrysalis – Transforming lives. One at a time.**
**Photograph taken before COVID-19*

IMPACT OF THE PROGRAMME

Many HNS come from low-SES families and disadvantaged backgrounds. They have little to no home supervision after school hours and tend to be more vulnerable to negative influences. The multifaceted issues faced by these students could lead to learning and behavioural issues, absenteeism and even attrition. This programme brings together concerted efforts to strengthen students' social-emotional learning, mindsets, relationships and inner drive. It has been observed to be an intensive yet sustainable intervention programme that not only engages the students in meaningful activities but also increases their self-worth.

Some positive student outcomes observed in terms of motivation to learn and behavioural indicators include improvements in:

1. Attendance
2. Academic performance
3. Eligibility for Secondary School
4. Behaviour
5. Affiliation & Connectedness to School

TRANSFERABILITY

PC was designed and delivered by leveraging the school's strengths (Student Development Team's experience in designing intervention strategies), internal capabilities (teacher competencies in building teacher-student relationship and counselling) and collaboration with partners. Most schools and SDTs have similar capabilities and capacity to scale up their after-school engagement programme.

Moving forward, besides continuing to deepen learning for staff, the school is also open to sharing its PC LAMPS planning and programming (including staff/teacher mentor training materials and resources) with interested schools and/or divisions.

OYEA NOTEWORTHY PRACTICE

ACHIEVE MULTIPLICATION MASTERY THROUGH MULTIPLICATION CHALLENGES

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ABOUT THE PROGRAMME

The P3 Multiplication Challenge was conceptualised to motivate students to master their multiplication tables in a fun manner through gamification during recess time.

Prior to the Multiplication Challenge, two groups of participants were identified through a pre-test – Math Leaders and Math Challengers. Students and Math Challengers (students who needed reinforcement in the learning of multiplication facts). The Math Challengers were given the option to engage in self-practice by learning their multiplication facts or to 'challenge' the Math Leaders at different stations set up during recess. Every successful challenge would earn the Math Challengers the GESPS 'Pokemon' cards!

Sample of customised GESPS 'Pokemon' card

IMPACT OF THE PROGRAMME

After the implementation of the Multiplication Challenge, about 90% of the Math Challengers showed improvement in their speed and accuracy when recalling multiplication facts. The constant practice of these multiplication facts formed a strong foundation for these students when learning other Mathematical topics in the Upper Level.

The Math Challengers were able to master their multiplication tables through such regular practice while tapping on the expertise of the Math Leaders in a safe, conducive and fun environment outside of class. The Math Leaders, on the other hand, improved on their speed and accuracy during the challenges. The Math Leaders also learnt to be more empathetic and patient while communicating and encouraging the Math Challengers during the game.

TRANSFERABILITY

This programme was well-received by students and teachers and was subsequently extended to Primary 4 and 5 students in Gan Eng Seng Primary School.

Besides extending this programme across levels, it can potentially be extended to other academic subjects as well, such as the spelling of high-frequency words in the English language, or the quick retrieval of scientific facts. The clever use of bite-sized challenges during recess time and tapping 'More Knowledgeable Others' makes this programme a truly noteworthy one.

*Math Leader using flashcards to practise with Math Challengers.**

*Math Challengers using iPads (Google Forms) for their 'Challenge' to earn their GESPS 'Pokemon' cards.**

*The Math Challenger 'challenging' the Math Leader.**

**Photographs taken before COVID-19*

OYEA NOTEWORTHY PRACTICE

EXCITE LEARNING THROUGH DIGITAL ESCAPE ROOMS

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ABOUT THE PROGRAMME

Digital escape rooms enhance the learning experience by tapping the affordances of technology to provide an immersive environment without physical constraints while the premise of escape room remain the same — to solve a series of questions and puzzles by analysing the clues given and unlocking a door.

The digital escape room is put together on Google Sites and students will need to complete tasks to get the passcode to unlock the room. Some of the ICT tools used in the digital escape room include:

- Simulation software (PhET)
- Digital Maker Kit (Micro:bits)
- Immersive Technology (Augmented Reality app on iPad – HP Reveal)

IMPACT OF THE PROGRAMME

The P6 students were thoroughly engaged throughout the three digital escape room lessons though they were revision topics (Adaptation, Photosynthesis, Food Web and Energy). The lessons also incorporated visual, auditory and kinaesthetic modes of learning.

Students were also exposed to basic coding and Augmented Reality to spark their interest in STEM education. Several of the 21st CC skills such as Critical and Inventive Thinking, Communication, Collaboration and Information Skills were also emphasised through the experience.

*After completing an e-jigsaw puzzle, a student can be seen using the iPad to scan the e-jigsaw puzzle as part of the Augmented Reality experience, during which they get to watch authentic videos of animals involved in the food chain.**

TRANSFERABILITY

Currently, there are many digital escape room lessons that have been specially curated on SLS for teachers to adopt. Teachers can adapt this idea and use these escape rooms as a form of revision for the class. They can also use this as part of their Blended Learning programme where students can develop greater self-directedness while being engaged in the learning.

*Students attempting the Virtual Simulation Room where they perform a virtual experiment to observe which light is best suited for photosynthesis. The student on the left is using the Notepad app in the iPad to record her results of the experiment.**

**Photographs taken before COVID-19*