Established in 2009 under the patronage of YABhg Datin Paduka Seri Rosmah Mansor, spouse of the Prime Minister of Malaysia

Complete G&T program under one roof - using tested and proven methods with excellent achievements.

A national G&T program in its sixth Year (6th) running at UKM, Malaysia

Collaborated, partnered and affiliated with John Hopkins University – Centre of Talented Youth for the School Holiday Program

Our programs are attended by more than 5,000 students locally and internationally.

Offer G&T programs that are unique. Students experience compacting, acceleration and continuous enrichment programs

Highly qualified and internationally certified teaching faculty – combination of university professors, lecturers and instructors.
MISSION
• To be a fountain of inspiration for Science, Technology, Engineering and Mathematics and Research in the Gifted and Talented Education

VISION
• To nurture balance gifted and talented individuals with inquisitive minds who contribute as world leaders, thinkers, innovators & humanitarians

MOTTO
• Explore, Innovate & Unique
  (Explore, amici, Unique)
WE OFFER FOUR WORLD STANDARD G&T ACTIVITIES:

Gagne’s and Renzulli’s Model is used to guide the whole structuring program of our Malaysian G & T initiative.

CONTINUOUS EDUCATIONAL PROGRAM

**Students Identification**
- On-line IQ test
- Competency-based tests

**School Holiday Camp**
- 3 weeks
- Fully Residential Enrichment program

**High School Education Program**
- Fully Residential
- High Level Curriculum + University Courses

**ASASIpintar Bridging Program**
- Pre-University Program

Copyright of PERMATApintar Negara 2014
**SIX LEARNING OUTCOMES OF OUR G&T PROGRAMME**

**LO1** – Mastery of knowledge from various disciplines and able to translate it to daily applications.

**LO2** – Demonstrate positive attitudes and responsibilities to self, others and environment.

**LO3** – Exhibit ethical behavioral actions and strong moral values as way of life.

**LO4** – Establish leadership actions, exceptional communication skill and ability to work as one team.

**LO5** – Show ability to think critically, creatively, analytically and innovatively in solving problems including use of high technology tools.

**LO6** – Able to think globally, skillful in entrepreneurship and manage effectively.
We work closely with our MoE to make sure that all students, regardless of background, geographical locations to take the tests. To date more than 1 million children have attempted.
How We Identify Our Gifted Students

UKM1

*Verbal Comprehension* - emphasis on crystallized intelligence (knowledge application)

*Perceptual Reasoning* - emphasis on fluid reasoning/intelligence (new learning)

UKM2

*Verbal Comprehension* - emphasis on crystallized intelligence (knowledge application)

*Perceptual Reasoning* - emphasis on fluid reasoning/intelligence (new learning)

*Working Memory* - emphasis on short-term memory/retrieval (auditory)

*Processing Speed* - emphasis on mental quickness (task performance with focused concentration & attention)

UKM3

Competency-based Tests
- Algebra
- Calculus
- Chemistry
- Physics
- Biology
- Research Skills
- Emotional Intelligence
- Creativity and Innovation
- Leadership Skills
|------------------|--------------|----------------------------------|

- Collaborated with JHU-CTY
- 23 Courses ARE offered during the school holiday camp
- More than 4,000 students + Int. Students

- 3 WEEKS FULLY RESIDENTIAL PROGRAM
- Small Classroom with three teachers per class (I, TA, RA)
- Students choose one course per camp
- Students can repeat participation every year if qualified
23 courses
Academically challenging
Encourage Higher Order Thinking

SCHOOL HOLIDAY CAMP
CONDUCTED TWICE A YEAR
(MAY AND DECEMBER)

Special Program: All Girls Summer Camp for Girls from the MAWHIBA Foundation, Saudi

International Participations: India, China, Mexico, Yemen, Qatar, Brunei, Singapore, Indonesia, South Africa, Mozambique etc.

Developing Independent Learning & Creative Leaders
HIGH SCHOOL EDUCATION PROGRAM

Compacted Curriculum (National Curriculum, Advance Placement, O and A level + University Courses)

Emphasizes on academic and non-academic activities

Character building through physical activities and volunteerism

Copyright of PERMATApintar Negara 2014
6 ACADEMIC COMPONENTS LEADING TO PERMATAPINTAR HIGH SCHOOL DIPLOMA
6 Semesters; Courses offered are: BM, BI, Math, Biology, Physics, Chemistry, Philosophy, Religious Study, History/Moral Study, Creative Arts/Performing Arts, Entrepreneurship.

Citizenship, Self-Development, Volunteerism, Co-curriculum Activities (Sports, Uniform Bodies), Research Mentoring Program, Academic & Non-Academic Competitions.

Curriculum Compacting

FONDATION 1

FONDATION 2

FONDATION 3

LEVEL 1

LEVEL 2

High School Diploma

Enrichment

GRADE ACCELERATION

GRADE ACCELERATION

LANGUAGES, MATHS, PHY., CHEMISTRY, BIO, HISTORY, RELIGIOUS STUDY, ALGEBRA, CALCULUS

SAT, SAT SUBJECT TESTS, ADVANCE PLACEMENT COURSES, TOEFL, IELTS, SPM

Copyright of PERMATApintar Negara 2014
HOW ARE CLASSES TAUGHT – STUDENT CENTERED

Small Number of students 15 - 17

Pre-and Post tests for Ability Grouping

Differentiated by Content, Process, Product and Teaching Strategies

Independent Learning

Guided Group Discussion

Project-Based

Curriculum Compacting

Acceleration by Topics

Enrichment Program (Mentoring, Coaching etc)

Copyright of PERMATApintar Negara 2014
WE USE DIFFERENTIATED TEACHING TECHNIQUES

✓ Kaplan’s Model
✓ Maker’s Model

Pre and post test
Off-level test

Type I, Type II and Type III activities to meet students different learning ability

Ability Grouping - We expand our classroom beyond the four walls

✓ National Curriculum as the Core Curriculum
✓ Focus on the Extended Curriculum
Transformation of the Microalgae *Chlorella vulgaris* with Green Fluorescent Protein (GFP)

**DASHINI A/P A. SURAS VARAN**
MENTORS: DR. NORMAH MOHD NOOR, DR. GOH HOE HAN,
PROF. YASMIN ANUM MOHD YUSOF

**ABSTRACT**

The microalgae, *Chlorella vulgaris* was transformed using green fluorescent protein (GFP). This microalgae has been utilized in food production and is a promising candidate for bioremediation and as a bioreactor for large-scale production of value-added proteins. *Chlorella vulgaris* was cultured in Bold’s Basal Media and was transformed through electroporation. Three different plasmids, *sGFP*(*S65T*), *pCAMBIA 1303* and *pCAMBIA 1302* were used. The cells exhibited green fluorescence when viewed under ultraviolet light. Thus, transformation was successfully carried out.
WE OFFER FUN CO-CURRICULUM & RECREATIONAL ACTIVITIES

Horse Riding

Archery

Swimming

Uniforms / Clubs

Music – Performing arts, school bands

Character Building programs (Life skills, Leadership, Humanities, EQ and Volunteerism)
EVALUATION AND ASSESSMENT

Formative Evaluation (60%) – Can be combination of any of the followings

- Pre- and Post-test
- Oral test for Science and Maths Courses (Oral Viva)
- Quizzes
- Laboratory Report/ Research Report
- Weekly assignments (in various form including video production, journal summary, report of work in progress etc.)
- Class Presentation
- Weekly tests
- Report from research mentor

Summative Evaluation (40%)

- Every three months (twice per semester)
TEACHING AREA (LCD projector & screen, teacher’s table and tools) – ability grouping will be used.

*each student to carry a laptop for learning.