









MALAYSIA

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AGENDA

- Gifted Students
- PERMATA Insan College
- Nurturing Scientific Mindset







WHO IS GIFTED STUDENT?



"Giftedness as the possession of exceptional natural abilities (aptitudes or gifts) in one or more domains, such as intellectual, creative, social, perceptual, muscular, or motor control. These abilities are present from birth or develop early and are considered to be at least among the top 10% of an individual's age group."

Francoys Gagné

THE UNTAPPED POTENTIAL OF GIFTED









High cognitive level



Heightened curiosity



Gifted underachievement

- Boredom from an unchallenging curriculum



Inclination toward critical thinking

RERMATA INSAN COLLEGE





Ol School in University

02 Aged 13-16

03

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Selected from across Malaysia through an IQ Test

Integrated, Enriched,
Accelerated Curriculum

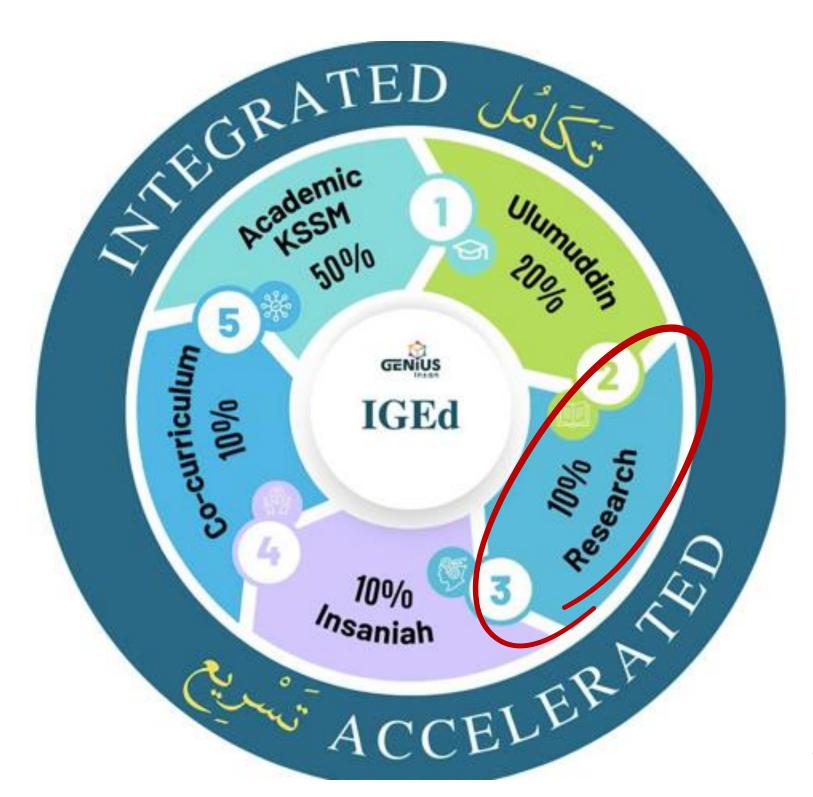












CURRICULUM GOLLEGE

Integrated Gifted Education (IGeD)







DEFINITION OF SCIENTIFIC MINDSET

The kind of thinking that involves the coordination of theory and evidence in the process of drawing conclusions, making decisions, and solving problems.

Kuhn, 2002

A way of thinking that thrives on deep questioning, self-reflection and expanding understand









MHAT ARE WE NURTURING?



Curiosity

An intrinsic desire to explore, ask, and understand.



Critical thinking:

The ability to analyze claims, evaluate evidence, and draw reasoned conclusions.



Open-mindedness:

Willingness to consider multiple perspectives.



Resilience:

Persistence in the face of uncertainty and failure.



Ethical reasoning

 Reflecting on the moral implications of research and innovation.





To make mistake Slow or get inconclusive results











NURTURING SCIENTIFIC MINDSET



TEACHER



- => ROLE MODEL
- => FACILITATOR
- => LIFE LONG LEARNERS
- => BUILDER OF SCIENTIFIC

CHARACTER

INSTITUTION

=> CREATOR OF SUPPORTIVE

ENVIRONMENT

=> PROMOTER OF

INTERDISCIPLINARY APPROACH

- => COLLABORATORS
- => FUNDDER











TEACHER

The art of teaching is the art of assisting discovery.

mark van doren









Emergency Alert

56m ago

NDRRMC(10:55AM,21Jul25) Orange Rainfall Warning sa Metro Manila. Nagbabanta ang matinding pag-ulan, pagbaha at pagguho ng lupa

Do you know that rain smells different in the city than in the village?

Curiosity in Everyday Life







TEAGHER

Role Model of Scientific Thinking

teacher demonstrates scientific thinking through actions, attitudes, and speech even beyond the classroom syllabus

Skepticism Without Cynicism

Drinking cold water after meals causes cancer.

Facilitator of Research and Innovation among Students

- Create opportunities and offer structure for students to engage in research and innovation
- Encourage students to take ownership of their research journey.











AMALAN fardu ain seperti solat dan wuduk dapat membantu kanak-kanak dengan gangguan spektrautisme (ASD) meningkatkan fokus kerana mereka cenderung bergantung kepada rutin yang tetap.

Solat sebagai intervensi bagi kanak-kanak autistik

MENURUT laporan Pusat Kawalan Penyakit (CDC) 2020, dianggarkan satu dalam 36 kanak-kanak di dunia menghidap ganggua selektura autisma (ASD)

spektrum autisme (ASD).

Di Malaysia, jumlah kanak-kanak autisti yang berdaftar dengan Jabatan Kebajikan Masyarakat (JKM) meningkat sebanyak 12, dalam tempoh setahun dari 2022 hingga 26 Sebahagian besar daripada mereka terdiri daripada murid sekolah rendah berbandin prasekolah dan sekolah menengah. Ini mungkin disebabkan kurangnya kesedarat mengenai autisme, menyebabkan murid tersebut lambat didiagnosis atau ibu bapa berada dalam fasa penafian.

Terdapat juga tanggapan masyarakat bahawa kanak-kanak suitstik boleh pulih sepenuhnya dan menjadi seperti kanak-kanak tipikal. Akibatnya, apabila kanak-kanak ini mengalami tautrum atau sukar dikawal di tempat awam, ibu bapa sering dianggap tidak pandai mendidik sekali gu menambah cabaran kepada keluarga atau penjasa.

enjaga.

Kanak-kanak yang menghidap ASD dapat ikenali seawal usia enam bulan dengan nenunjukkan ciri-ciri seperti kurang teraksi mata, tidak memberi respons epada bunyi dan tidak menunjukkan kspresi muka seperti gembira, sedih tau marah. Gangguan ini memberi kesan ngsung kepada interaksi sosial, komunika tera tingkah laku kanak kensebut.

erta tingkah laku kanak kanak tersebut. Pub bapa atau penjaga kepada kanaknak autistik sering menghadapi tekanan ari segi kewangan, emosi dan fizikal. Kos rapi yang tinggi menyebabkan ramai naak-kanak autistik, terutama dari keluan rependapatan rendah tidak mendapat akspada interversi yang diperlukan. Namun, terdapat alternatif intervensi ya

kepada intervensi yang dipertukan. Namun, terdapat alternatif intervensi yan boleh dilakukan dengan kos rendah, iaitu melalui amalan fardu ain bagi kanak-kanak Muslim.

osun. Armalan fardu ain seperti solat dan duk dapar membantu kanak kanak meningkatkan fokus kerana mereka nderung bergantung kepada rutin yang ap. Pergerakan solat dan wuduk yang rulang kali dapat membantu mereka mengatur emosi dan mengurangkan tingkah laku impulsif. Amalan ini juga dapat menyumbang kepada perkembangan memo jangka panjang mereka.

membantu kanak-kanak autistik menguasbahasa. Solat bejemah bersama keluargatau rakan sebaya juga memberi peluangkepada mereka untuk berinteraksi secarasosial dalam keadaan terkawal. Denganmembiasakan diri dengan rutin ini, mereboleh menjadi lebih tenang, kurangcemas dan membangunkan disiplin dalan kehidupan seharian.

Walaupun solat boleh menjadi satu bentul intervensi, terdapat beberapa cabaran yang perlu diberi perhatian seperti gangguan sensori, kesukaran dalam pergerakan dan kesukaran dalam folus

Oleh itu, intervensi ini boleh dimulakan dengan menggunakan air suam semasa wuduk dan membenarkan mereka memilih pakaian solat atau sejadah. Pengenalan kepada wuduk juga boleh dilakukan secara berperingkat, misalnya dengan hanya membasuh muka terlebih dahui sebelum memberkenalkan rukun yang lain.

Mereka juga boleh dilatih untuk melakukan pergerakan solat secara berar ansur. Solat dengan bersandar pada dind boleh membantu memberikan sokongan tambahan kepada badan mereka.

menggunakan al-Quran digital juga boleh membantu meningkatkan fokus mereka. Peranan pelbagai pihak dalam menyediakan akses kepada penjaga sepert sesi latihan, tekmik pengurusan tingkah laku, dan penyediaan rutin harian yang lebih berstruktur amat penting. Solat bolel menjadi intervensi alternatif yang berkesa dalam membantu perkembangan kanakkanak autistik agar mereka dapat mencap potensi maksimum. Intervensi ini juga potensi maksimum. Intervensi ini juga

ADRIANA KHAIRIN KHAIRUDDIN & DR. NUR FAZIDAH ASMUJI









Lifelong Learner

"A teacher's growth fuels the growth of their students."

• Teachers must always keep learning.









TEAGHER

Builder of Scientific Character and Ethics



- Guide students to be honest in their work, responsible in handling data, and respectful of others' ideas.
- Nurturing students having integrity, discipline, and a deep sense of accountability









INSTITUTION

Creating a Supportive Environment

- Access to tools and resources such as science laboratories, experimental materials, digital databases, and scientific journals.
- A flexible academic structure that allows time for inquiry-based learning and student-led projects rather than rigid syllabus coverage.











INSTITUTION

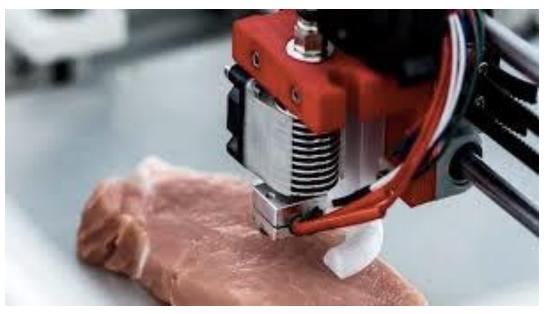
Promoting Interdisciplinary Approaches

Integrate science with technology, ethics, religion, sociology, and even the arts.

What are the ethical implications?

What does religion say about altering life?

science affects society, and society also shapes science













INSTITUTION

Seed Funding or Internal Grants

- Testing Ideas without fear
- Boosting Confidence and Ownership
- Encouraging a Research Culture





scientific thinking is not about always getting it right. It's about asking better questions next time

Recognizing and Rewarding

acknowledged for their efforts, not just results, fuels their passion for research.







INSTITUTIO



Collaboration Between Ministries:

MOE, MOHE, MOSTI

Ministry of Education (MOE)

-Ensure the curriculum is flexible enough to support enrichment, research activities,

Ministry of Higher Education (MOHE)

-bring the expertise, research labs, supervision, and collaboration opportunities.

Ministry of Science, Technology, and Innovation (MOSTI)

-support grants, competitions, tech incubation, and commercialization.









NSTITUTO



Collaboration Between Ministries: MOE, MOHE, MOSTI

So why does this collaboration matter? Because when MOE, MOHE, and MOSTI work together:

- Students don't just learn theory, they apply it through real research.
- Teachers don't just teach, they mentor innovation.
- Universities don't just publish, they nurture young talent.
- And the nation doesn't just educate, it builds a future generation of scientists, thinkers, and innovators.

scientific thinking is not about always getting it right. It's about asking better questions next time





10 - 11 **OCTOBER** 2025

Kolej PERMATA Insan, **Universiti Sains** Islam Malaysia MODE: HYBRID



HTTP://PERMATAINSAN.USIM.EDU.MY/I-JURECON-2025/

LOCAL PRESENTER/ INNOVATOR

KPM SECONDARY SCHOOL STUDENT RM50/ PAPER (INCLUSIVE OF WORKSHOP & PROCEEDING PUBLICATION)

NON-KPM SCHOOL STUDENT/ PRE-UNIVERSITY & UNDERGRADUATE STUDENT

RM80

INTERNATIONAL PRESENTER/ INNOVATOR

SCHOOL & UNIVERSITY STUDENT

USD30

KPM SECONDARY SCHOOL STUDENT

NON-KPM SCHOOL STUDENT/

PRE-UNIVERSITY & UNDERGRADUATE STUDENT INTERNATIONAL

RM20 USD10

FREE

PUBLICATION

- All full articles will be published in the conference's e-proceedings
- E-posters will be published as an e-book
- USD50 publication fees for non-KPM school students and international participants

TECHNOLOGY RELIGIOSITY **ENGINEERING MATHEMATICS** SCIENCE

CONFERENCE

POSTER

INNOVATION COMPETITION

IDEATION CHALLENGE REGISTRATION AND ABSTRACT SUBMISSION 16 JUNE - 10 AUG

DEADLINE OF FULL ARTICLE /POSTER SUBMISSION 30 AUG 2025

FEE PAYMENT 18 AUG - 6 SEPT 2025

NOTIFICATION OF ABSTRACT/ POSTER ACCEPTANCE 7 JULY - 16 AUG

NOTIFICATION OF CORRECTION 6 SEPT 2025

INNOVATION VIDEO AND POSTER SUBMISSION 13 SEPT 2025







Thank You



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