

PM SHRI KENDRIYA VIDYALAYA AFS SULUR
BEST PRACTICES ON PROMOTION OF STEM

SCHOOL INNOVATION COUNCIL

Background

The School Innovation Council (SIC) is an initiative that aims to promote a learning environment that encourages students to develop skills in creativity, innovation, problem solving, and entrepreneurship. The SIC's motto is "A leap to transform innovation landscape in Schools".



Objective

- Fostering a culture of innovation, entrepreneurship, and ideation
- Connecting the school education ecosystem with the higher education ecosystem
- Providing a platform for schools, academia, industry, and other stakeholders to work together
- Facilitating training, field visits, and other activities to promote innovation and entrepreneurship

Implementation

1. Creating school innovation council

Under the esteemed leadership of Principal Mr. Rakesh Kumar Mishra, Vidyalaya has fostered a culture of innovation and creativity among its students. His vision extends beyond merely nurturing scientific and entrepreneurial talents. Our School innovation council collaborates with leading experts to enrich both the learning and practical experiences of students.

PM SHRI KENDRIYA VIDYALAYA AFS SULUR

School Innovation Council

Chairperson
Rakesh Kumar Mishra
(Principal)

Expert members
1. Dr. Venkat Subramaniam
(PSG College of Arts & Science)
2. Dr. R Sridhar
(PSG College of Technology)

Convener
Ms. S Subbalakshmi

Teachers Members
1. Ms. V Tamilarasi
2. Ms. Renuka
3. Ms. Divya
4. Ms. Sarita Sharma
5. Mr. Pawan Agrahari

Student Members
1. Tanusri SP (Head Girl)
2. Arush (Head Boy)
3. Miruthla M
4. Dinadayal S
5. Kavinya B
6. M Aradhana
7. Adhithya Jayraj
8. Pranesh C
9. Adhil
10. P P Sudarshan

PHYSICS

SCHOOL INNOVATION COUNCIL
An initiative of MoE's Innovation Cell

2. Personalized Learning Approaches

- **Blended Learning Models:** The council adopted a blended learning model where students could engage with both traditional face-to-face instruction and online coursework. This model allowed for more individualized pacing and support.
- **Learning Pathways:** Personalized learning pathways were developed based on each student member's strengths, interests, and areas for improvement. Teachers provide enough space that doesn't hinder the innovation temperament of young minds..

3. Collaborative Learning Strategies

- **Council is designed** to include more project-based learning opportunities, encouraging students to work on real-world problems and collaborate with peers with similar mindset.
- **Student-Led Conferences:** Students are given the opportunity to lead conferences with their parents and teachers, showcasing their learning progress and setting personal goals.
- **Field Visit:** To expose students to real-world applications of innovation, encourage creativity, and inspire entrepreneurial thinking through direct interaction with industry experts and innovative environments. One such visit was held recently to an International Defence exhibition showcasing the multiple scientific achievements in defence.



4. Professional Development for Teachers

- **Training Workshops:** Teachers participated in workshops on using new technologies, incorporating project-based learning, and differentiating instruction. Continuous professional development was emphasized to keep up with emerging educational trends.
- **Peer Learning Communities:** Teachers were organized into professional learning communities to share best practices, collaborate on curriculum development, and support each other in implementing innovative strategies.

Results

1. Increased Student Engagement

- **Higher Participation Rates:** Surveys and observational data indicated a marked increase in student participation and enthusiasm for learning. Students participation in programs like INSPIRE-MANAK, JIGYASA SCIFIC and JIGYASA TECHNOVATION, RSBVP, has increased visibly.

3. Teacher Satisfaction and Development

- **Increased Job Satisfaction:** Teachers reported higher levels of job satisfaction due to the increased engagement from students and the supportive professional development opportunities.
- **Collaborative Growth:** The peer learning communities fostered a culture of collaboration and continuous improvement among council members.

Conclusion

The School Innovation Council enhanced student engagement and academic performance by integrating technology, personalizing learning, and fostering collaboration. The key to success was a comprehensive approach that included technology, teaching strategies, and professional development. However, ongoing support and flexibility were crucial in addressing the challenges that arose.

Concludingly, we can say that the **School Innovation Council** initiative has bridged the gap in connecting **schools** with the Innovation & Entrepreneurial enabler ecosystem of the country. Currently in the School Innovation Marathon, 11 students, in 5 teams have submitted the idea under the guidance of 3 mentor teachers.

Report on IOQM Achievement

Subject: Recognition of Students for Performance in IOQM Olympiad 2024-25

Three students of PM SHRI Kendriya Vidyalaya Sulur have brought laurels to the school by securing positions among the top 10% of participants in the prestigious Indian Olympiad Qualifier in Mathematics (IOQM) for the academic year 2024-25.

The achievers are:

1. Master Navin Kaarthik N(Class XII A)
2. Master Harsanth C G (Class XI B)
3. Master Somesh Bhardwaj (Class XI B)

Each of these students received certificates recognizing their exceptional performance in one of the most challenging national-level mathematical Olympiads. Their achievement highlights their dedication, mathematical aptitude, and hard work.

The school takes immense pride in their accomplishment and congratulates them on their success. Their performance serves as an inspiration for other students to excel in academics and participate actively in such competitive examinations.

Principal

PM SHRI Kendriya Vidyalaya, Sulur

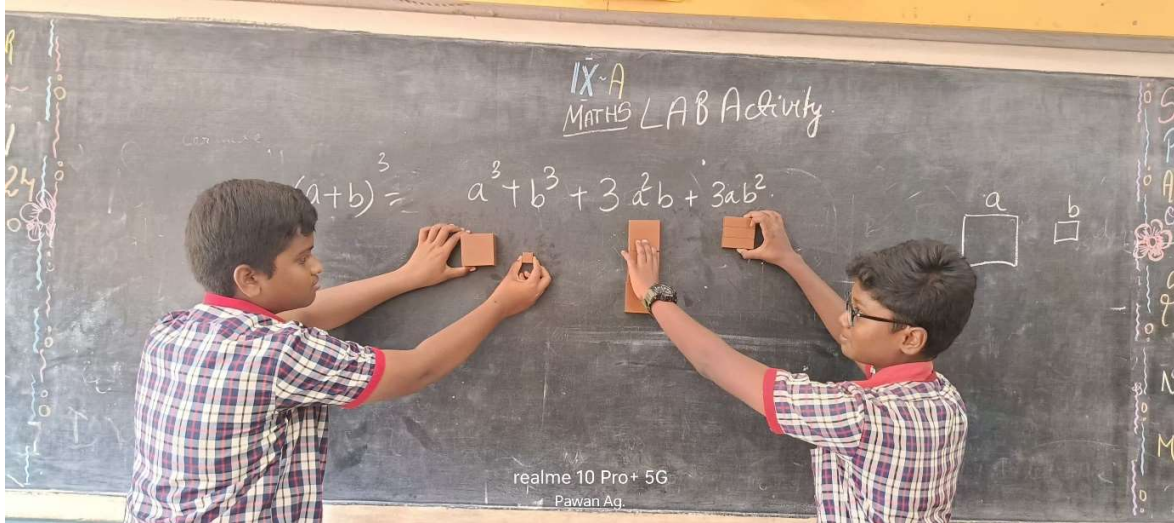


Report on Maths Circle

The Secondary Section's Maths Circle has been instrumental in enhancing students' comprehension of mathematical concepts, including theorems, formulae, and algebraic identities. Through engaging activities, students have developed a deeper understanding of these fundamental topics.

On National Mathematics Day, Class XI students delivered an insightful presentation on the sum of infinite natural numbers, demonstrating their analytical skills and grasp of advanced mathematical concepts. Additionally, students explored the contributions of Srinivasa Ramanujan across various branches of mathematics, gaining inspiration from his profound work.

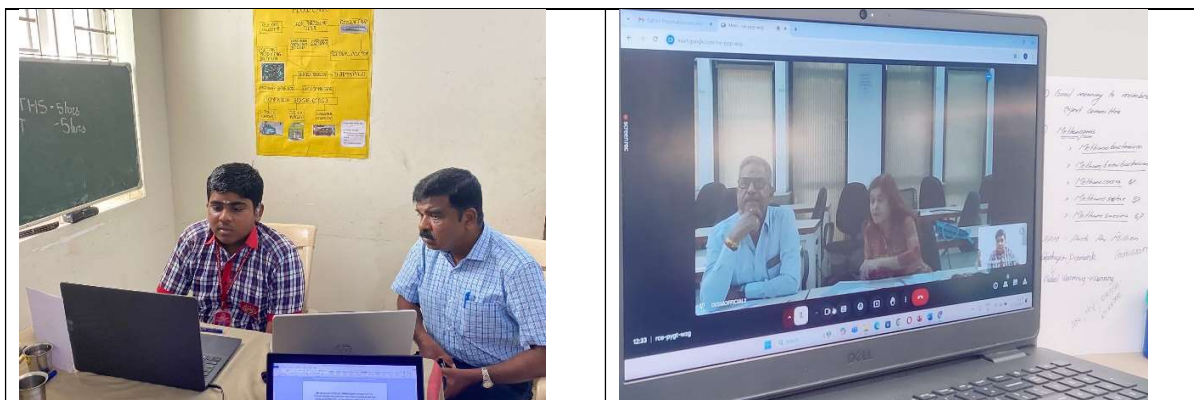
These initiatives have fostered a collaborative learning environment, encouraging students to delve deeper into mathematics and appreciate its real-world applications. The Maths Circle continues to be a cornerstone of our educational program, nurturing critical thinking and problem-solving abilities among students.





PRAYAAS 2024

Master C Pranesh of class X was shortlisted under PRAYAAS 2024 and interview.



List of Project Shortlisted under PRAYAAS-2024

36.	69	Water Scarcity based Assessment of Water Conservation Requirement in Eravathu Kunnu, Kozhikode District, Kerala state.	PM Shri KV No. 2, Calicut	Kerala
37.	70	AI-Based Early Flood Disaster Detection System for Assam	PM Shri KV AFS, Chabua	Assam
38.	73	Accident avoider device at turning road	PM Shri KV, Haflong	Assam
39.	77	Rusty Water & Its Purification	KV, Lokra	Assam
40.	79	To provide solution for water logging due to heavy rains in Delhi -NCR	PM Shri KV AFS Tughlakabad	Delhi
41.	80	Towards a sustainable milk distribution mechanism	PM Shri KV, Idukki	Kerala
42.	81	GLWS-Gas Leakage Warning System	PM Shri KV, Mahe	Puducherry
43.	83	Innovative Approach for Recycling Stagnant Water	PM Shri KV AFS, Ihanjavur	Tamil Nadu
44.	84	Development of Anoxic Methanogenic Consortium for Carbon dioxide sequestration to produce Compressed Bio-methane (CBM/CBG): A Novel Carbon Neutral Approach	PM Shri KV School, Air Force Station, Sullur	Tamil Nadu
45.	86	Feasibility and Development of Affordable	KV HT G...	Assam

In **VVM**, 3 students selected as district rankers and will be writing state level in first week of January

1. SAMEN BISWAL, class 7
2. SMRITI NITIKA S class 8
3. T.SURYA class 11

Soil health program

The school has generated 25 soil health cards for local farmers and presented on National Soil Day.