

Topper Mantra Innovation Challenge (TMIC) 2026

Theme 1: School Innovation

50 Premium Hackathon Problem Statements | Classes 8–12

Segmented handbook edition with bold section labels, objective bullets, and proper spacing.

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Segment A: Personalized Learning & Classroom Innovation

TMIC-SI-001

Personalized Learning for Every Student

Theme: School Innovation

Category: Classes 8-12

Background: Every classroom has students with different learning speeds, interests, strengths and academic needs. Some learners understand concepts quickly, while others need more practice, explanation or support. Large class sizes make it difficult for teachers to provide individual attention to every student.

Problem Statement: Design an innovative solution that enables schools to provide personalized learning experiences for students with different learning needs while helping teachers monitor individual progress without significantly increasing workload.

Objectives:

- Identify learning needs early
- Reduce learning gaps
- Support self-paced learning
- Help teachers plan better interventions

Scope of Innovation: Participants may explore classroom models, peer learning systems, physical learning kits, digital tools, AI-assisted recommendations, mentoring methods or any creative approach.

Expected Impact: Students receive appropriate support, teachers understand learner needs better, and classrooms become more inclusive.

Challenge Tags: Personalized Learning • Inclusive Education • Learning Gaps

TMIC-SI-002

Building a Bully-Free School

Theme: School Innovation

Category: Classes 8-12

Background: Bullying can be physical, verbal, emotional, social or online. It affects confidence, attendance, friendships, academic performance and mental wellbeing. Many students hesitate to report bullying because they fear embarrassment, retaliation or being ignored.

Problem Statement: Design an innovative solution that helps schools prevent bullying, encourage safe reporting and build a culture of empathy, respect and student safety.

Objectives:

- Reduce bullying incidents
- Encourage responsible reporting
- Promote empathy and kindness
- Support early intervention

Scope of Innovation: Solutions may include reporting mechanisms, peer-support models, awareness systems, school activities, behaviour improvement approaches or community involvement.

Expected Impact: A safer, more respectful school where students feel confident, protected and included.

Challenge Tags: Bullying • School Safety • Empathy • Inclusion

TMIC-SI-003

Smart Homework and Revision Management

Theme: School Innovation

Category: Classes 8-12

Background: Students often manage multiple homework tasks, revision plans, projects and examination preparation at the same time. Poor planning leads to missed deadlines, stress and last-minute learning.

Problem Statement: Develop an innovative solution that helps students organize homework, revision and assignments while building consistent study habits and reducing academic pressure.

Objectives:

- Improve daily planning
- Encourage regular revision
- Reduce academic stress
- Build self-discipline

Scope of Innovation: Participants may propose planners, study systems, peer accountability models, teacher workflows, digital tools, printed trackers or gamified learning routines.

Expected Impact: Students complete work more consistently and develop stronger study discipline throughout the year.

Challenge Tags: Homework • Revision • Study Habits • Productivity

TMIC-SI-004

Never Miss a Lesson Again

Theme: School Innovation

Category: Classes 8-12

Background: Students may miss classes because of illness, competitions, transfers, family emergencies or natural disruptions. Some students also lose notebooks or incomplete notes, making it difficult to catch up.

Problem Statement: Design a solution that ensures students can access important classroom notes, assignments, explanations and learning resources whenever they miss a lesson or lose study material.

Objectives:

- Reduce learning disruption
- Support absent students
- Create reliable access to resources
- Improve continuity of learning

Scope of Innovation: Ideas may include peer note-sharing, class resource banks, audio summaries, teacher-approved repositories, printed backup systems or hybrid models.

Expected Impact: Students recover missed learning faster and remain connected with classroom progress.

Challenge Tags: Notes • Learning Resources • Absentee Support

TMIC-SI-005

Making Every Classroom More Engaging

Theme: School Innovation

Category: Classes 8-12

Background: Many classrooms still depend heavily on one-way lectures. Students may become passive, hesitate to ask questions and lose interest in learning when lessons are not interactive.

Problem Statement: Design innovative ways to make classroom learning more engaging, participative and student-centered without making teaching complicated for teachers.

Objectives:

- Increase student participation
- Encourage questioning
- Improve attention and curiosity
- Support active learning

Scope of Innovation: Participants may explore activity-based learning, classroom games, discussion formats, interactive tools, peer activities, visual aids or creative teaching practices.

Expected Impact: Students become active participants in learning rather than passive listeners.

Challenge Tags: Classroom Engagement • Active Learning • Participation

TMIC-SI-006

Learning Beyond Textbooks

Theme: School Innovation

Category: Classes 8-12

Background: Students often memorize textbook content for examinations without understanding real-world applications. This limits curiosity, creativity and practical problem-solving ability.

Problem Statement: Design an innovative solution that connects classroom concepts with real-life applications, practical activities and hands-on learning experiences.

Objectives:

- Promote experiential learning
- Improve conceptual understanding
- Encourage curiosity
- Build practical problem-solving

Scope of Innovation: Teams may propose experiments, field activities, community learning, project-based models, demonstration kits, simulations or real-world assignments.

Expected Impact: Students understand concepts deeply and connect school learning with life outside the classroom.

Challenge Tags: Experiential Learning • Practical Education • Projects

TMIC-SI-007

Building Better Team Learning

Theme: School Innovation

Category: Classes 8-12

Background: Group projects often become unfair or disorganized. Some students dominate, others remain silent, tasks are unclear and deadlines are missed. However, teamwork is essential for future success.

Problem Statement: Design an innovative solution that improves team-based learning by ensuring equal participation, clear responsibilities and better collaboration among students.

Objectives:

- Improve collaboration
- Ensure equal contribution
- Develop communication skills
- Build leadership and responsibility

Scope of Innovation: Participants may create teamwork frameworks, role systems, peer feedback methods, collaboration tools, group reflection practices or classroom models.

Expected Impact: Students learn to work responsibly in teams and develop collaboration skills useful beyond school.

Challenge Tags: Teamwork • Collaboration • Communication

TMIC-SI-008

Breaking Language Barriers in Learning

Theme: School Innovation

Category: Classes 8-12

Background: Many students understand ideas better in their home language or local language, but learning materials may be available mainly in another language. This creates avoidable learning barriers.

Problem Statement: Design a solution that helps students overcome language barriers while maintaining quality learning and classroom participation.

Objectives:

- Improve accessibility

- Support multilingual learning
- Increase participation
- Reduce language-based learning gaps

Scope of Innovation: Solutions may include bilingual resources, local-language glossaries, audio explanations, peer translation models, visual learning aids or community support.

Expected Impact: Language becomes a bridge to learning rather than a barrier.

Challenge Tags: Language Inclusion • Multilingual Learning • Accessibility

TMIC-SI-009

Rethinking Student Assessment

Theme: School Innovation

Category: Classes 8-12

Background: Traditional exams often test memory more than creativity, application, collaboration or problem-solving. Many students' real strengths remain invisible when assessment depends mainly on marks.

Problem Statement: Design an innovative assessment model that evaluates students more fairly by recognizing knowledge, skills, creativity, effort and practical application.

Objectives:

- Encourage holistic assessment
- Reduce exam pressure
- Recognize diverse abilities
- Improve feedback quality

Scope of Innovation: Teams may propose portfolios, project assessments, competency tracking, peer review, skill demonstrations, self-reflection systems or hybrid evaluation models.

Expected Impact: Schools gain a more complete picture of student growth beyond marks alone.

Challenge Tags: Assessment • Skills • Creativity • Evaluation

TMIC-SI-010

Designing the Classroom of Tomorrow

Theme: School Innovation

Category: Classes 8-12

Background: Education is changing rapidly due to new careers, technologies and learning needs. Future classrooms must be flexible, inclusive, practical and inspiring.

Problem Statement: Imagine the classroom of the future and design innovative solutions that make learning more engaging, inclusive, collaborative and future-ready while remaining practical for schools.

Objectives:

- Encourage visionary thinking
- Improve learning environments
- Support future skills
- Promote inclusive design

Scope of Innovation: Participants may redesign space, furniture, learning methods, technology use, collaboration models, student roles or teacher support systems.

Expected Impact: A practical future classroom model that can inspire schools to modernize learning.

Challenge Tags: Future Classroom • Learning Design • Innovation

Segment B: Student Development, Leadership & School Culture

TMIC-SI-011

Helping New Students Feel at Home

Theme: School Innovation

Category: Classes 8-12

Background: Students joining a new school often struggle to understand the campus, rules, classmates, teachers and culture. This can reduce confidence and participation during the first few weeks.

Problem Statement: Design an innovative solution that helps new students adapt quickly to a new school environment and develop a strong sense of belonging.

Objectives:

- Reduce adjustment challenges
- Encourage friendships
- Improve confidence
- Build inclusive school culture

Scope of Innovation: Participants may explore orientation models, buddy systems, campus guides, welcome activities, peer support, parent orientation or digital/non-digital solutions.

Expected Impact: New students feel welcomed, confident and connected from the beginning.

Challenge Tags: Orientation • Student Experience • Belonging

TMIC-SI-012

Discovering Every Student's Hidden Talent

Theme: School Innovation

Category: Classes 8-12

Background: Schools often recognize academic performance more than creative, artistic, athletic, leadership, communication or social talents. Many students never get the opportunity to discover their strengths.

Problem Statement: Design an innovative solution that helps schools identify, nurture and celebrate the unique talents of every student beyond academics.

Objectives:

- Identify diverse talents
- Promote holistic development
- Increase participation
- Build student confidence

Scope of Innovation: Solutions may include talent mapping, showcases, portfolios, mentoring, school festivals, clubs, competitions or community recognition.

Expected Impact: Every student gets opportunities to discover strengths and feel valued.

Challenge Tags: Talent • Creativity • Holistic Development

TMIC-SI-013

Building Future Student Leaders

Theme: School Innovation

Category: Classes 8-12

Background: Leadership opportunities in schools are often limited to a few roles such as monitor or captain. Many students never get practical chances to take responsibility and lead.

Problem Statement: Design an innovative solution that develops leadership qualities among a wider group of students through meaningful responsibility and participation.

Objectives:

- Develop leadership
- Promote responsibility
- Improve communication

- Build teamwork

Scope of Innovation: Participants may propose leadership pathways, student committees, volunteer missions, rotating responsibilities, project teams or student governance models.

Expected Impact: More students become confident, responsible and capable of leading positive change.

Challenge Tags: Leadership • Responsibility • Student Development

TMIC-SI-014

Building a Culture of Appreciation

Theme: School Innovation

Category: Classes 8-12

Background: Schools often highlight mistakes more than improvement, kindness, effort and positive behaviour. Lack of appreciation can reduce motivation among students, teachers and staff.

Problem Statement: Design an innovative solution that creates a culture where positive actions, effort and improvement are regularly recognized and appreciated.

Objectives:

- Increase motivation
- Encourage positive behaviour
- Improve relationships
- Build positive school culture

Scope of Innovation: Ideas may include peer recognition, appreciation walls, kindness campaigns, celebration systems, storytelling formats or community recognition.

Expected Impact: A happier school environment where effort and kindness are valued.

Challenge Tags: Recognition • Motivation • School Culture

TMIC-SI-015

Helping Students Build Lifelong Study Habits

Theme: School Innovation

Category: Classes 8-12

Background: Many students study only before exams and struggle with procrastination, distraction and inconsistent learning routines. Good study habits are rarely taught systematically.

Problem Statement: Design an innovative solution that helps students develop disciplined study habits and become lifelong learners.

Objectives:

- Improve consistency
- Reduce procrastination
- Encourage self-learning
- Improve academic outcomes

Scope of Innovation: Teams may explore habit-building systems, study circles, reflection journals, accountability partners, learning challenges or routines.

Expected Impact: Students become independent, disciplined learners with stronger academic confidence.

Challenge Tags: Study Habits • Self Learning • Discipline

TMIC-SI-016

Student Voice Matters

Theme: School Innovation

Category: Classes 8-12

Background: Students experience school every day, yet their ideas are rarely included in decisions about facilities, events, rules, learning spaces or activities.

Problem Statement: Design an innovative solution that enables students to contribute ideas and participate meaningfully in improving their school.

Objectives:

- Increase student participation
- Promote responsibility
- Improve communication
- Build collaborative decision-making

Scope of Innovation: Solutions may include idea forums, student advisory councils, suggestion systems, innovation committees, surveys or participatory planning.

Expected Impact: Schools become more student-centered and students develop ownership of their environment.

Challenge Tags: Student Voice • Participation • School Improvement

TMIC-SI-017

Finding Your Passion Before Choosing Your Career

Theme: School Innovation

Category: Classes 8-12

Background: Many students choose subjects or careers because of pressure, trends or limited awareness. They may not understand their own interests, strengths and future possibilities.

Problem Statement: Design an innovative solution that helps students discover their passions, strengths and interests before choosing academic streams or career paths.

Objectives:

- Encourage self-discovery
- Improve career awareness
- Reduce career confusion
- Support informed decisions

Scope of Innovation: Participants may create exploration programmes, simulations, mentor interactions, exposure activities, skill challenges or reflective tools.

Expected Impact: Students make more confident and informed choices about their future.

Challenge Tags: Career Discovery • Passion • Future Skills

TMIC-SI-018

Reimagining School Clubs

Theme: School Innovation

Category: Classes 8-12

Background: Many school clubs become inactive because of unclear goals, low participation or lack of student ownership. Yet clubs can develop skills beyond academics.

Problem Statement: Design an innovative solution that transforms school clubs into active spaces for creativity, collaboration, leadership and learning.

Objectives:

- Increase participation
- Improve club continuity
- Promote skill development
- Build leadership

Scope of Innovation: Solutions may include club discovery systems, student-led models, inter-school collaboration, annual roadmaps, mentoring or showcase events.

Expected Impact: Students engage deeply in extracurricular communities and build practical skills.

Challenge Tags: School Clubs • Extracurricular • Leadership

TMIC-SI-019

Every Student a Changemaker

Theme: School Innovation

Category: Classes 8-12

Background: Students often notice problems in their school or community but rarely get structured opportunities to solve them. Education should develop active problem-solvers.

Problem Statement: Design an innovative framework that empowers every student to identify real problems and create meaningful solutions for school or community improvement.

Objectives:

- Promote innovation
- Encourage civic responsibility
- Develop problem-solving
- Build entrepreneurial thinking

Scope of Innovation: Participants may propose student challenge programmes, service-learning, innovation labs, mentorship, community projects or impact portfolios.

Expected Impact: Students become active contributors rather than passive learners.

Challenge Tags: Changemaker • Community • Innovation

TMIC-SI-020

Designing the Ideal School Experience

Theme: School Innovation

Category: Classes 8-12

Background: Schools are evolving beyond academics. A strong school experience includes learning, safety, creativity, friendships, life skills, activities and future readiness.

Problem Statement: Imagine the ideal school experience and design innovative solutions that improve student life, learning, campus experience and participation while remaining practical.

Objectives:

- Encourage visionary thinking
- Improve school experience
- Promote innovation
- Support future-ready education

Scope of Innovation: Solutions may cover learning spaces, services, systems, culture, technology, infrastructure, routines or student support.

Expected Impact: A practical blueprint for a school experience students genuinely value.

Challenge Tags: Future School • Student Experience • Transformation

Segment C: Teacher Support, Parent Engagement & Institutional Systems

TMIC-SI-021

Every Teacher, A Lifelong Learner

Theme: School Innovation

Category: Classes 8-12

Background: Teachers need continuous opportunities to improve teaching practices, learn new methods and share experiences. One-time workshops are often not enough.

Problem Statement: Design an innovative solution that enables continuous teacher learning, collaboration and knowledge sharing throughout the academic year.

Objectives:

- Support teacher development
- Encourage peer learning
- Improve classroom practice
- Build professional communities

Scope of Innovation: Participants may explore teacher learning circles, micro-learning, mentoring, resource sharing, classroom observation or recognition systems.

Expected Impact: Teachers stay updated and students benefit from better classroom experiences.

Challenge Tags: Teacher Development • Professional Learning

TMIC-SI-022

Reducing Teachers' Administrative Burden

Theme: School Innovation

Category: Classes 8-12

Background: Teachers spend significant time on registers, reports, paperwork, attendance records and administrative tasks, reducing time for teaching and mentoring.

Problem Statement: Design an innovative solution that reduces repetitive administrative work so teachers can focus more on students and learning.

Objectives:

- Save teacher time
- Simplify documentation
- Reduce repetitive work
- Improve school efficiency

Scope of Innovation: Solutions may include process redesign, automation, shared workflows, simplified formats, digital tools or administrative support models.

Expected Impact: Teachers spend more time on meaningful teaching and student support.

Challenge Tags: Teacher Productivity • Administration • Workflow

TMIC-SI-023

Reimagining Parent-Teacher Meetings

Theme: School Innovation

Category: Classes 8-12

Background: Parent-Teacher Meetings often focus mainly on marks and complaints. They rarely become holistic conversations about strengths, behaviour, wellbeing and growth.

Problem Statement: Design an innovative solution that makes parent-teacher meetings more meaningful, structured and focused on complete student development.

Objectives:

- Improve parent-school communication
- Focus beyond marks
- Create growth plans
- Build trust

Scope of Innovation: Participants may propose meeting formats, student-led PTMs, progress cards, feedback systems, parent preparation tools or follow-up models.

Expected Impact: Parents and teachers collaborate better to support students.

Challenge Tags: PTM • Parent Engagement • Student Growth

TMIC-SI-024

The Library of the Future

Theme: School Innovation

Category: Classes 8-12

Background: Many school libraries are underutilized and seen only as places to borrow books. They can become centers for reading, research, creativity and collaboration.

Problem Statement: Design an innovative solution that transforms school libraries into vibrant learning hubs for reading, research, creativity and student collaboration.

Objectives:

- Increase library usage
- Promote reading culture
- Support research
- Encourage collaboration

Scope of Innovation: Solutions may include reading programmes, student-led libraries, digital catalogs, creative corners, book clubs, research zones or makerspace integration.

Expected Impact: Libraries become active spaces for learning and discovery.

Challenge Tags: Library • Reading • Research • Creativity

TMIC-SI-025

Reinventing School Laboratories

Theme: School Innovation

Category: Classes 8-12

Background: Laboratories are often used only during scheduled practical periods. Equipment may remain underutilized and students get limited time for independent experimentation.

Problem Statement: Design an innovative solution that makes school laboratories more accessible, safe and useful for year-round experimentation and innovation.

Objectives:

- Increase lab utilization
- Encourage experimentation
- Improve safety
- Support STEM learning

Scope of Innovation: Teams may explore open-lab models, booking systems, experiment banks, safety protocols, student research clubs or resource management.

Expected Impact: Students gain more hands-on scientific experience.

Challenge Tags: Laboratory • STEM • Experimentation

TMIC-SI-026

Every School Event Should Teach Something

Theme: School Innovation

Category: Classes 8-12

Background: Annual functions, exhibitions, sports days and celebrations require time and resources but may not always connect with learning outcomes or skill development.

Problem Statement: Design an innovative solution that transforms school events into meaningful learning experiences that develop creativity, leadership and teamwork.

Objectives:

- Connect events with learning

- Increase student ownership
- Develop life skills
- Improve participation

Scope of Innovation: Solutions may include event redesign, student-led planning, learning rubrics, community showcases, reflection models or skill-based roles.

Expected Impact: School events become powerful platforms for holistic learning.

Challenge Tags: Events • Leadership • Experiential Learning

TMIC-SI-027

Smarter School Transportation

Theme: School Innovation

Category: Classes 8-12

Background: School transport involves safety, route planning, delays, communication, emergencies and parent concerns. Many systems are still manually coordinated.

Problem Statement: Design an innovative solution that makes school transportation safer, more reliable and better coordinated for students, parents and schools.

Objectives:

- Improve transport safety
- Strengthen communication
- Optimize routes
- Prepare for emergencies

Scope of Innovation: Participants may explore safe route systems, bus coordination, emergency workflows, student safety education, parent updates or transport process redesign.

Expected Impact: Students travel more safely and schools manage transport more efficiently.

Challenge Tags: Transport • Safety • School Operations

TMIC-SI-028

School Resource Sharing Network

Theme: School Innovation

Category: Classes 8-12

Background: Some schools lack laboratories, sports equipment, projectors, books or specialized resources, while nearby schools may have underutilized assets.

Problem Statement: Design an innovative solution that enables nearby schools to share educational resources efficiently, fairly and safely.

Objectives:

- Improve resource access
- Reduce underutilization
- Encourage collaboration
- Support smaller schools

Scope of Innovation: Solutions may include resource exchange systems, scheduling models, cluster partnerships, shared inventories, transport logistics or community support.

Expected Impact: Schools use resources more efficiently and students get better learning opportunities.

Challenge Tags: Resource Sharing • Collaboration • School Network

TMIC-SI-029

Making Schools Disaster Ready

Background: Schools may face fires, earthquakes, floods, storms, medical emergencies or security threats. Preparedness can save lives but is often limited to occasional drills.

Problem Statement: Design an innovative solution that improves disaster preparedness, emergency response and safety awareness in schools.

Objectives:

- Improve preparedness
- Create clear response systems
- Increase student awareness
- Support emergency coordination

Scope of Innovation: Participants may propose evacuation models, simulation drills, communication systems, safety maps, training modules or community partnerships.

Expected Impact: Schools become safer and more resilient during emergencies.

Challenge Tags: Disaster Preparedness • School Safety • Resilience

TMIC-SI-030

India's Model School 2050

Background: Future schools must prepare students for changing careers, technology, sustainability, global collaboration and lifelong learning.

Problem Statement: Imagine India's Model School of 2050 and design practical innovations across learning, infrastructure, governance, student life and community participation.

Objectives:

- Encourage future thinking
- Promote holistic education
- Inspire scalable models
- Improve long-term readiness

Scope of Innovation: Solutions may include campus design, learning systems, technology, governance, student roles, partnerships or new education models.

Expected Impact: A visionary but practical model for the future of schooling.

Challenge Tags: Model School • Vision 2050 • Future Education

Segment D: Campus Design, Infrastructure & Learning Spaces

TMIC-SI-031

Reinventing the School Playground

Background: Playgrounds are often used only for sports periods or free time. They can also develop teamwork, creativity, leadership and active learning.

Problem Statement: Design an innovative solution that transforms the school playground into a space for physical activity, teamwork, creativity and experiential learning.

Objectives:

- Increase playground utilization
- Promote active learning
- Improve physical development

- Build teamwork

Scope of Innovation: Teams may explore multipurpose play zones, inclusive games, activity circuits, student-designed games, outdoor learning or leadership activities.

Expected Impact: Playgrounds become extensions of learning, not just free-time spaces.

Challenge Tags: Playground • Physical Education • Active Learning

TMIC-SI-032

Classroom Furniture for Future Learning

Theme: School Innovation

Category: Classes 8-12

Background: Traditional classroom furniture often supports only one-way teaching. Fixed seating limits discussion, projects, group work and flexible learning.

Problem Statement: Design adaptable classroom furniture or seating systems that support collaboration, comfort and future-ready learning methods.

Objectives:

- Improve classroom flexibility
- Support collaboration
- Increase comfort
- Enable active learning

Scope of Innovation: Solutions may include modular desks, low-cost seating, storage-integrated furniture, mobile layouts or inclusive design ideas.

Expected Impact: Classrooms become more flexible, comfortable and collaborative.

Challenge Tags: Furniture • Learning Space • Classroom Design

TMIC-SI-033

Making School Cafeterias Better

Theme: School Innovation

Category: Classes 8-12

Background: School cafeterias affect health, hygiene, time management and student satisfaction. Long queues, limited choices and food waste reduce their effectiveness.

Problem Statement: Design an innovative solution that improves cafeteria operations, nutrition, hygiene and student convenience.

Objectives:

- Reduce waiting time
- Improve food planning
- Promote hygiene
- Increase student satisfaction

Scope of Innovation: Participants may propose service models, menu planning, queue management, feedback systems, seating layouts, nutrition awareness or waste reduction methods.

Expected Impact: Students get a healthier and smoother dining experience.

Challenge Tags: Cafeteria • Nutrition • Student Services

TMIC-SI-034

Learning Corners Across Campus

Theme: School Innovation

Category: Classes 8-12

Background: Learning should not be limited to classrooms. Corridors, empty walls, waiting areas and open corners can become useful spaces for curiosity and collaboration.

Problem Statement: Design creative learning corners across the school campus that encourage reading, discussion, exploration and student creativity.

Objectives:

- Use campus spaces better
- Encourage informal learning
- Promote creativity
- Improve collaboration

Scope of Innovation: Solutions may include reading corners, question walls, interactive exhibits, student galleries, outdoor learning zones or innovation displays.

Expected Impact: The entire school campus becomes a learning environment.

Challenge Tags: Campus Design • Learning Corners • Creativity

TMIC-SI-035

Smart Navigation Inside School

Theme: School Innovation

Category: Classes 8-12

Background: Large school campuses can confuse new students, parents and visitors. Laboratories, offices, halls and activity areas may be difficult to find quickly.

Problem Statement: Design an innovative navigation system that helps people move easily across a school campus while improving accessibility and visitor experience.

Objectives:

- Reduce confusion
- Improve accessibility
- Guide visitors
- Support new students

Scope of Innovation: Solutions may include smart signage, printed maps, QR guides, color-coded routes, student guide systems or accessible navigation aids.

Expected Impact: Schools become easier and safer to navigate.

Challenge Tags: Navigation • Campus • Accessibility

TMIC-SI-036

Reimagining School Notice Boards

Theme: School Innovation

Category: Classes 8-12

Background: Traditional notice boards are often ignored. Important announcements, competitions and opportunities may not reach all students effectively.

Problem Statement: Design an engaging communication system that ensures important school information reaches every student clearly and on time.

Objectives:

- Improve information access
- Increase participation
- Reduce missed opportunities
- Celebrate achievements

Scope of Innovation: Participants may explore interactive boards, student news systems, digital displays, announcement formats, opportunity boards or class-level communication.

Expected Impact: Students stay informed and connected with school opportunities.

Challenge Tags: Communication • Notice Board • School Information

TMIC-SI-037

Transforming Morning Assembly

Theme: School Innovation

Category: Classes 8-12

Background: Morning assemblies often become repetitive and announcement-focused. They can instead build confidence, communication, curiosity and school spirit.

Problem Statement: Design innovative ways to make morning assemblies engaging, educational and student-driven.

Objectives:

- Improve student participation
- Develop communication skills
- Make assemblies meaningful
- Promote shared learning

Scope of Innovation: Solutions may include student-led sessions, innovation showcases, daily knowledge capsules, interactive quizzes, cultural exchange or theme-based assemblies.

Expected Impact: Assemblies become inspiring learning moments that students value.

Challenge Tags: Assembly • Communication • Leadership

TMIC-SI-038

The Ideal Student Common Area

Theme: School Innovation

Category: Classes 8-12

Background: Students need spaces outside classrooms where they can collaborate, relax, discuss ideas and work productively. Many schools lack well-designed common areas.

Problem Statement: Design a student common area that encourages collaboration, creativity, healthy interaction and constructive use of free time.

Objectives:

- Improve campus experience
- Support collaboration
- Create safe social space
- Encourage creativity

Scope of Innovation: Solutions may include seating layouts, creativity zones, discussion spaces, indoor recreation, student work areas or shared rules.

Expected Impact: Students get a positive space for interaction and collaboration.

Challenge Tags: Common Area • Collaboration • Student Space

TMIC-SI-039

Visually Inspiring Classrooms

Theme: School Innovation

Category: Classes 8-12

Background: Classroom appearance influences mood, attention and motivation. Plain rooms may feel uninspiring, while overly decorated spaces can distract students.

Problem Statement: Design classroom interiors that inspire curiosity and learning without creating visual distraction.

Objectives:

- Improve classroom atmosphere
- Encourage ownership
- Support learning
- Promote creativity

Scope of Innovation: Participants may explore learning walls, student displays, subject corners, color planning, interactive visuals or theme-based rooms.

Expected Impact: Classrooms become more inspiring, organized and learner-friendly.

Challenge Tags: Classroom Design • Visual Learning • Creativity

TMIC-SI-040

The School Campus of Tomorrow

Theme: School Innovation

Category: Classes 8-12

Background: A school campus should support learning, safety, accessibility, creativity and collaboration. Many campuses are not designed for future education needs.

Problem Statement: Design a practical and scalable vision for a future-ready school campus that improves learning spaces, student experience and campus culture.

Objectives:

- Reimagine campus design
- Improve student experience
- Support future learning
- Promote accessibility

Scope of Innovation: Solutions may include master planning, smart spaces, inclusive design, student zones, flexible classrooms, safety systems or campus culture ideas.

Expected Impact: A model campus that inspires schools to become more learner-centered.

Challenge Tags: Campus Design • Future School • Infrastructure

Segment E: School Operations, Safety & Resource Management

TMIC-SI-041

The Lost and Found Challenge

Theme: School Innovation

Category: Classes 8-12

Background: Schools lose notebooks, ID cards, bottles, lunch boxes, uniforms, calculators and other belongings regularly. Many items are never returned.

Problem Statement: Design an innovative solution that helps schools efficiently manage lost-and-found items and quickly return belongings to rightful owners.

Objectives:

- Improve item recovery
- Reduce student inconvenience
- Create accountability
- Simplify tracking

Scope of Innovation: Solutions may include tagging, reporting systems, physical counters, student volunteers, claim verification or digital/non-digital recovery models.

Expected Impact: Lost items are recovered faster and school property is managed better.

Challenge Tags: Lost and Found • Student Services • Operations

TMIC-SI-042

Reducing Waiting Time During Lunch Break

Theme: School Innovation

Category: Classes 8-12

Background: Long queues during lunch breaks reduce eating time, create crowding and affect student comfort. Inefficient distribution may also increase wastage.

Problem Statement: Design an innovative solution that improves lunch break efficiency while ensuring fair, comfortable and timely access to meals or cafeteria services.

Objectives:

- Reduce queue time
- Improve student convenience
- Ensure fairness
- Support better planning

Scope of Innovation: Participants may explore scheduling, layout redesign, pre-ordering, distribution counters, crowd management, student roles or process innovations.

Expected Impact: Students spend less time waiting and more time eating, resting and socializing.

Challenge Tags: Lunch Break • Queue Management • Cafeteria

TMIC-SI-043

Improving Washroom Hygiene in Schools

Theme: School Innovation

Category: Classes 8-12

Background: Clean washrooms are essential for health, dignity and attendance. Maintaining cleanliness throughout the day remains difficult in many schools.

Problem Statement: Design an innovative solution that helps schools maintain clean, hygienic and well-managed washroom facilities throughout the school day.

Objectives:

- Improve hygiene
- Support student dignity
- Enable maintenance tracking
- Promote responsible use

Scope of Innovation: Solutions may include monitoring routines, student awareness, feedback systems, supply tracking, maintenance workflows or design improvements.

Expected Impact: Students experience safer, cleaner and more dignified facilities.

Challenge Tags: Washroom Hygiene • Health • Campus Management

TMIC-SI-044

Smart Visitor Management for Schools

Theme: School Innovation

Category: Classes 8-12

Background: Schools receive parents, vendors, officials, guests and workers every day. Visitor management must balance safety, convenience and minimal disruption.

Problem Statement: Design an innovative solution that improves visitor registration, movement, communication and campus security without inconvenience for genuine visitors.

Objectives:

- Improve campus safety
- Streamline visitor entry

- Maintain records
- Reduce disruption

Scope of Innovation: Participants may propose visitor passes, check-in workflows, signage, alert systems, waiting zones, identity verification or staff coordination models.

Expected Impact: Schools become safer while visitors are handled respectfully and efficiently.

Challenge Tags: Visitor Management • Security • School Operations

TMIC-SI-045

Learning Should Continue Even When a Teacher Is Absent

Theme: School Innovation

Category: Classes 8-12

Background: Unexpected teacher absence often leads to cancelled classes, idle periods or incomplete lessons. This affects learning continuity and classroom discipline.

Problem Statement: Design an innovative solution that ensures meaningful learning continues whenever a scheduled teacher is unavailable.

Objectives:

- Reduce learning loss
- Support substitute teachers
- Maintain class discipline
- Ensure lesson continuity

Scope of Innovation: Solutions may include substitute lesson kits, peer learning, activity banks, teacher handover notes, recorded lessons or emergency learning plans.

Expected Impact: Students continue learning productively even during teacher absence.

Challenge Tags: Teacher Absence • Learning Continuity • Substitute Planning

TMIC-SI-046

Creating Noise-Free Classrooms Without Punishment

Theme: School Innovation

Category: Classes 8-12

Background: Classroom noise can disrupt teaching and learning. Punishment may reduce noise briefly but does not always build long-term self-discipline.

Problem Statement: Design an innovative solution that encourages self-discipline and creates productive classrooms without relying mainly on punishment.

Objectives:

- Reduce disruptive noise
- Promote self-regulation
- Improve learning atmosphere
- Encourage responsibility

Scope of Innovation: Participants may explore class norms, visual cues, sound awareness, student roles, positive reinforcement, seating plans or behaviour models.

Expected Impact: Students learn to manage classroom behaviour responsibly.

Challenge Tags: Classroom Behaviour • Self Discipline • Learning Environment

TMIC-SI-047

Making School Timetables Smarter

Theme: School Innovation

Category: Classes 8-12

Background: Traditional timetables may ignore teacher workload, student energy levels, lab availability, activity periods, seasonal changes and examination schedules.

Problem Statement: Design an innovative solution that helps schools create flexible, balanced and efficient timetables for students and teachers.

Objectives:

- Balance workload
- Improve resource allocation
- Reduce scheduling conflicts
- Support better learning flow

Scope of Innovation: Solutions may include smart scheduling methods, visual planners, feedback-based timetable design, flexible slots or resource-aware planning.

Expected Impact: Schools manage time more efficiently and reduce timetable-related stress.

Challenge Tags: Timetable • Scheduling • School Operations

TMIC-SI-048

Strengthening Communication Between School and Home

Theme: School Innovation

Category: Classes 8-12

Background: Important information about homework, competitions, meetings, attendance and activities may not reach parents clearly or on time, causing confusion.

Problem Statement: Design an innovative solution that strengthens school-home communication while keeping information timely, accurate and easy to understand.

Objectives:

- Improve communication
- Reduce misunderstandings
- Increase parent participation
- Support student progress

Scope of Innovation: Participants may propose message systems, parent dashboards, communication calendars, multilingual notices, student diaries or feedback loops.

Expected Impact: Parents and schools coordinate better to support students.

Challenge Tags: Parent Communication • School Home Link

TMIC-SI-049

Managing School Resources Efficiently

Theme: School Innovation

Category: Classes 8-12

Background: Schools own many shared resources such as lab equipment, sports materials, musical instruments, projectors, computers and books. Poor tracking leads to loss or underuse.

Problem Statement: Design an innovative solution that helps schools manage, monitor and optimize shared resources efficiently.

Objectives:

- Track resources
- Reduce loss and damage
- Improve utilization
- Support accountability

Scope of Innovation: Solutions may include inventories, booking systems, QR labels, student monitors, maintenance logs, sharing workflows or analytics.

Expected Impact: School resources are used more effectively and responsibly.

Challenge Tags: Inventory • Resource Management • Operations

TMIC-SI-050

Reducing Paperwork in Schools

Theme: School Innovation

Category: Classes 8-12

Background: Schools depend heavily on paper for forms, circulars, attendance, permissions, certificates and administrative records. This consumes time, cost and storage.

Problem Statement: Design an innovative solution that reduces paperwork while keeping school administration simple, accessible and efficient.

Objectives:

- Reduce paper usage
- Simplify administration
- Improve record access
- Save time and cost

Scope of Innovation: Participants may explore process redesign, digital forms, reusable templates, approval workflows, notice systems or hybrid low-resource models.

Expected Impact: School administration becomes faster, simpler and more sustainable.

Challenge Tags: Paperless School • Administration • Efficiency