



Young Inventors Journal Paper Writing Competition 2021 Report

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KLAY EnerSol (M) Sdn. Bhd.

Free Malaysia Today (FMT)

Institut Pendidikan Guru Malaysia (IPGM)

Malaysian Mental Health Association (MMHA)

Mentors

Parents

Participants

And

Judges, Volunteers and Event Committee Members

Working Group Committee of Young Inventors Journal (YIJ) Paper Writing Competition 2021

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Project Director **Ts. Pratheep Sandrasaigaran**

ASTI Secretariat Representative

Ms. Caroline Maria

Chief Judges

Chief Judge 1 - Dr. Jegalakshimi Jewaratnam
Chief Judge 2 - Ms. Yeow Seuk Fei

Committee Members

Mr. Syed Muhammad Bin Syed Hood

Pn. Lailati Bt. Mohd. Noh



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Executive Summary

For the third time, the Young Inventors Journal (YIJ) conducted a paper writing competition under the Association of Science, Technology, and Innovation (ASTI). This paper writing competition was funded by KLAY EnerSol (M) Sdn. Bhd and an anonymous donor. The competition's title was "Reinventing A Better Future Post Covid-19 for Social Wellbeing & Mental Health".

The paper writing competition is part of a YIJ initiative to encourage young people to think critically and systematically. YIJ also wants to provide young people with a chance to express their ideas on how to make the world a better place post Covid-19 in relation to Social Wellbeing and Mental Health. This is the world they would inherit. It also aids young people in developing the discipline of writing a well-researched, in-depth paper on matters that concerns them.

On 9th August 2021, the Young Inventors Journal (YIJ) Paper Writing Competition 2021 was launched. The paper writing competition was announced by email and WhatsApp messages, as well as on the ASTI website, Facebook page, and Instagram account. For the competition's implementation, ASTI developed a special partnership with the Institute Pendidikan Guru Malaysia (IPGM), the Malaysian Mental Health Association (MMHA), and Free Malaysia Today (FMT) as the media partner. This year there was also a video category for participants aged 17 years old and below.

ASTI received a total of 85 registrations and 65 paper proposals. The participants were then sent paper writing guidelines, modules, and training videos. Participants were given the opportunity to ask questions during a Question and Answer (Q&A) session. The judges evaluated all of the participants' paper proposals and were shortlisted for full paper writing and video development.

Shortlisted candidates were notified via email to proceed with paper writing/video development and submit them within the timeframe provided. A total of 39 full papers and seven videos were submitted to ASTI.

For paper/ video marking, a training video was developed and shared with the judges. The papers/ videos were reviewed using a rubric with a double-blind system. The papers/ videos submitted by the participants were judged by a total of 29 judges. The best six papers were chosen for an online viva to decide the winners of the Bronze, Silver, Gold, and Platinum Awards.

A Virtual Prize Giving Ceremony was held to announce the winners of the YIJ Paper Writing Competition 2021. During the ceremony, the Bronze, Silver, Gold, and Platinum Award winners were virtually announced.

As a conclusion, the YIJ Paper Writing Competition 2021 was a success and received a good response.

Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. – World Health Organization

1. Introduction

1.1 Summary of Young Inventors Journal Paper Writing Competition 2021

The Association for Science, Technology, and Innovation (ASTI) is a group of educators, scientists, industry leaders, and individuals dedicated to strengthening the scientific community's role in encouraging the nation's young to pursue and excel in science. The Association of Science, Technology, and Innovation (ASTI) is a non-governmental organisation (NGO) dedicated to empowering young children through initiatives such as the Science Fair for Young Children (SFYC), Young Inventors Challenge (YIC), Creative and Critical Thinking Camp (CCTC), "Wings of Fire" series, ASTI Leap Challenge (ALC), ASTI Progressive Learning and Understanding Science (A-PLUS) programme, Young Scientific Explorer (YSE), and the ASTI Feynman (AFC).

YIJ is an online research journal for the young person to develop well researched solutions for the issues pertinent today. Accordingly, YIJ hopes to empower the young with their new ideas and inventions. We maintain high standards for publication with the guidance of our dedicated experienced Science Advisory Board, consisting of professional researchers. YIJ also allows anyone to submit a paper and they need not be affiliated with any academic or research organisations.

In 2019, we held our first paper writing competition for children aged 13 to 18 years old under the banner of Young Inventors Journal, with the general theme of "How to Conserve and Save Water."

Following the success of the first paper writing competition, ASTI organised the second paper writing competition, this time focusing on education and titled "How to Rebuild a Better World Post Covid-19 for Education." Participants had to be between the ages of 18 and 40 to enter the competition. The Ministry of Science, Technology and Innovation (MOSTI) fully funded the Young Inventors Journal Paper Writing Competition 2020/21, which was backed by Yayasan Inovasi Malaysia (YIM).

The third paper writing competition was launched on 9th August 2021 and concluded on 10th February 2022. The title of the competition was "Reinventing A Better Future Post Covid-19 for Social Wellbeing & Mental Health". KLAY EnerSol (M) Sdn. Bhd. and an anonymous donor were the funders for this third competition.

1.2 Background

This was either a team or individual base paper writing competition. The papers were written either by the writers themselves or by a team of no more than five (5) people. The paper had to be concise and well-researched, based on the description of the problem they identified, and explanations of the writers' proposed solution(s). The explanation should be backed up by their own research such as a case study, which includes the writers' own data to be collected from the relevant stakeholder(s) or experiments/tests/surveys/reviews in regard to the writers' solution or invention.

The solution can be in any format. It could be a product, a methodology, a process, or even a government policy recommendation. Their solution should be useful for Individuals, governments, Non-governmental organisations, and others. The writer(s) should also specify whether their solution is targeted at a certain segment or is applicable to everybody.

1.3 Objectives

The objectives of the paper writing competition are:

- to create public awareness of the current world order.
- to identify ways to bring about change to this order.
- b to extend suggestions to responsible/interested parties for action.
- > to help young people identify real-world problems and produce real-world solutions relevant to their daily lives.
- to help people think more critically.
- b to help the young build the discipline of writing a well research-based paper.

2. Mode of Implementation

ASTI formed a Working Group to implement the Young Inventors Journal (YIJ) Paper Writing Competition 2021 after obtaining funding from the project funders. The YIJ Paper Writing Competition was implemented and delivered by this Working Group Committee. The Working Group Committee was comprised of representatives from the YIJ Editorial Board, ASTI Secretariat and partners. ASTI's project partners include KLAY EnerSol (M) Sdn. Bhd., Institute Pendidikan Guru Malaysia (IPGM), Malaysian Mental Health Association (MMHA) and Free Malaysia Today (FMT) as the media partner. ASTI proposed to the Institut Pendidikan Guru Malaysia (IPGM) that IPG students be encouraged to participate in the paper writing competition.

Besides IPG students, the competition was also open to anyone aged between 18 and 40 years old. In addition, we had a video category for participants aged 17 years old and below. There were two categories in this competition, the paper category and video category. Either individuals or teams of no more than 5 people could participate in this competition. Participants were asked to submit an academic paper for the paper category or submit a video for the video category addressing the problems presented with the solution. This is an online based competition.

The YIJ Working Group Committee held discussions on how to plan and implement the YIJ Paper Writing Competition.

Milestones for YIJ Paper Writing Competition 2021

| Milestones of YIJ Paper Writing Competition 2021 (August 2021 – February 2022) | | |
|--|------------------------------|--|
| Item | Time Frame | |
| Distribution of YIJ poster | August 2021 – October 2021 | |
| Paper Writing Module development | August 2021 | |
| Team registration | August 2021 – October 2021 | |
| Forming YIJ working group committee | August 2021 | |
| Paper proposal review | October 2021 | |
| Training video development | August 2021 | |
| Dissemination of training videos and guideline to the shortlisted participants | October 2021 | |
| Question & answer session for participants | October 2021 | |
| Received papers from participants | October – December 2021 | |
| Judges training | December 2021 | |
| Paper marking | December 2021 – January 2022 | |
| Announcement of top 6 papers for online viva | January 2022 | |
| Online viva | January 2022 | |
| Virtual winners announcement | February 2022 | |
| Post-mortem of YIJ Paper Writing Competition 2021 | March 2022 | |
| Final report preparation | April – May 2022 | |

On 9th August 2021, the Young Inventors Journal (YIJ) Paper Writing Competition 2021 was launched. The poster and information of the competition were disseminated via WhatsApp, email, ASTI website, ASTI Facebook and ASTI Instagram. Participants that were interested in participating in the competition had until 10th October 2021 to register.

SERIES B



Presents an International Competition on:

REINVENTING A BETTER FUTURE POST COVID-19

for Social Wellbeing & Mental Health

The Covid-19 pandemic has forced us to change so much that everything appears to be entirely new. Let's be involved and do this!

THE PAPER COMPETITION

- Participants need to look at specific problem or issue that they feel requires to be addressed and propose what they think would be a viable and equitable solution.
- Choose an issue related to social wellbeing and/or mental health.

THE PAPER ENTRY CRITERIA

- 18-40 years old (open competition with only one category)
- Individual/team of no more than 5 persons
- Number of words: 1,000 3,000 words
- Language: English
- Online training will be provided

All papers that meet with the required standards set by the Young Inventors Journal (YIJ) rules & regulations will receive an online certificate of participation; e-mailed to the author and may be published in our online journal (T&C Apply).

Prizes for the Paper Category

- 1 Platinum Award: RM 1,500
- 1 Gold Award : RM 1.000
 - 2 Silver Awards : RM 700 per winner
 - 2 Bronze Awards : RM 500 per winner Prizes for the Video Journal Category
 - •1st place Gold Award: RM 700
 - 2nd place Silver Award: RM 500 per winner
 - 3rd place Bronze Award: RM 300 per winner



10 October 2021

THE PAPER REQUIREMENTS

- The solution can be a product, methodology, process or even a government policy
- The solution can be useful for an individual, the government, NGOs etc.

Special Video Category for the Young below 18 years old

(please read terms and conditions in our website carefully)

- Individual/team of no more than 5 persons
- Video length: 3 7 minutes
- Language: English
- Online training will be provided
- The similar requirements like the paper competition apply for this category, except that the presentation will be in video format.

For more details, kindly contact ASTI via email at wijasti@gmail.com or 014 - 712 4217 (WhatsApp only). To register, please visit the link below to download the form:

https://www.asti.org.my/postcovid_social/

Organised by the Association of Science, Technology & Innovation (ASTI) - a Malaysian non-governmental organisation with global partners which is dedicated towards empowering young people in innovative thinking and responsible action.











www.asti.org.my

A briefing was organised on 4th October 2021 at 5.00 p.m. via YouTube. The purpose of the briefing was to explain the competition to the participants and public. It was conducted by Dr. Mohamed Yunus Yasin.





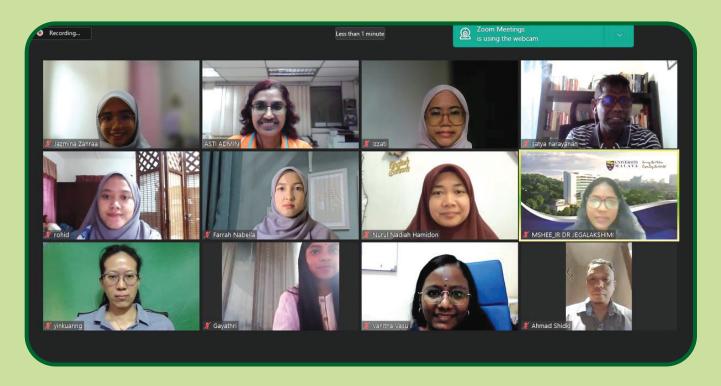
A total of 85 entries (teams and individuals) registered for the competition from which ASTI received 65 paper proposal. The paper proposals received were reviewed by the judges and shortlisted for full paper writing. On 14th January 2022, the shortlisted participants were notified by email, and training videos and guideline templates were e-mailed to them. A Question and Answer (Q&A) session was held for the participants via Google Meet on 16th October 2021 at 10.00 a.m. The purpose of the Q&A session was to clarify enquiries from participants. Mr. Pratheep Sandrasaigaran, the Project Director of the paper writing competition, led the Q&A session. During the Q&A session, the participants posed a lot of questions.

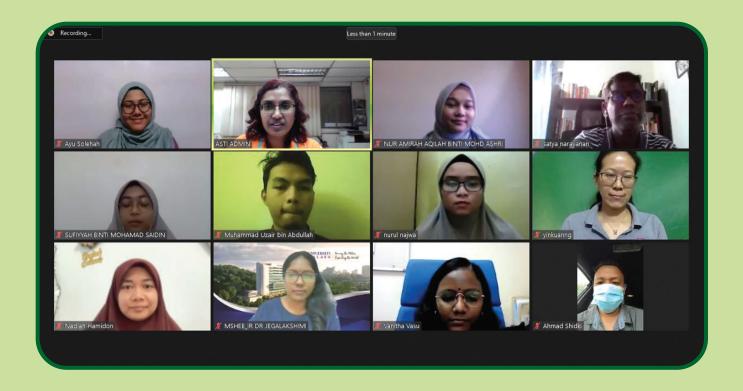




Participants had until 12th December 2021 to complete and submit their papers or videos. A total of 39 papers and 7 videos were submitted by participants. The submitted papers and videos were distributed to the judges for marking from 22nd December 2021 until 12 January 2022. A training video was developed for the judges and sent to them as a guidance.

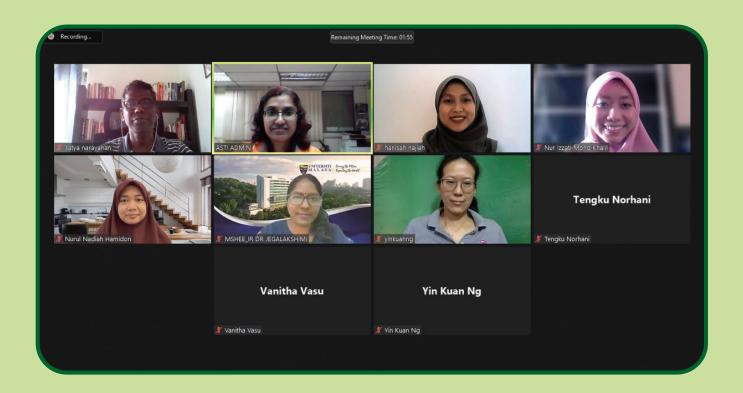
Following the marking and shortlisting, the top 6 participants for paper category were contacted via email and invited to participate in an online viva. On 14th January 2022, a guideline was emailed to the selected participants to help them prepare for the viva session. An online viva was held with four (4) judges from the judging team on 22nd January 2022. After the online viva, the judges decided on the winners of the Platinum, Gold, Silver and Bronze Awards. There was no online viva held for the video category. The winners for the video category were determined based on the video marking only.





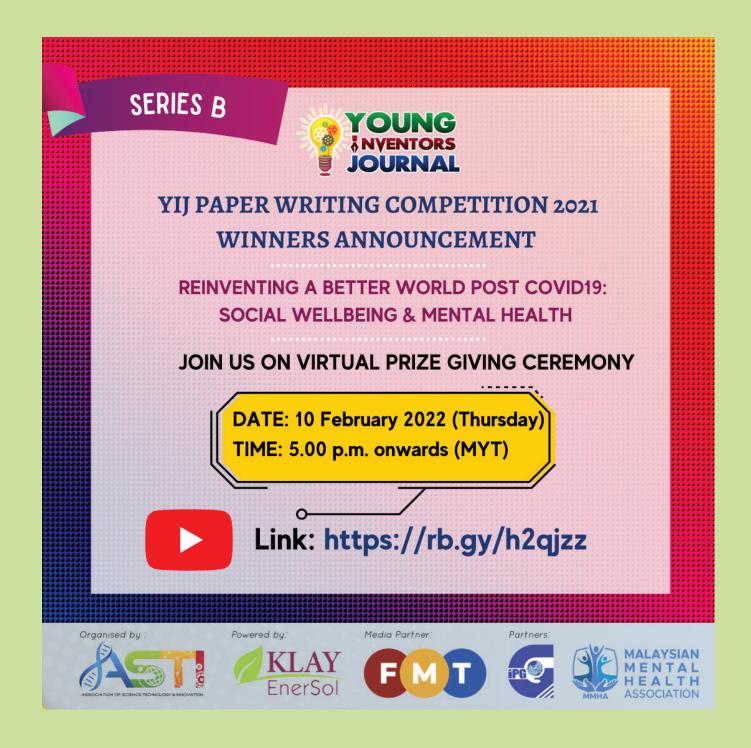








The Platinum, Gold, Silver, and Bronze Award winners were announced via YouTube during the Virtual Prize Giving Ceremony on 10th February 2022 at 5.00 p.m. One Platinum Award, 1 Gold Award, 2 Silver Awards and 2 Bronze Awards were given away for the paper writing competition. A part from that, 1 Gold Award, 1 Silver Award and 1 Bronze Award were given for the video category. The paper writing competition was held in English language.



Below are the details of registration:

Table 1: Number of Registration by States

| State | Number of Registration for Paper Category | Number of Registration for Video Category |
|----------------------------|--|--|
| Wilayah Persekutuan (K.L.) | 5 | 3 |
| Sarawak | 5 | 0 |
| Sabah | 6 | 1 |
| Kedah | 10 | 0 |
| Johor | 2 | 0 |
| Selangor | 15 | 2 |
| Negeri Sembilan | 4 | 1 |
| Perak | 1 | 2 |
| Putrajaya | 0 | 0 |
| Kelantan | 0 | 1 |
| Pulau Pinang | 3 | 0 |
| Terengganu | 8 | 0 |
| Pahang | 1 | 0 |
| Melaka | 2 | 0 |
| Singapore | 0 | 8 |
| Thailand | 0 | 4 |
| Philippines | 1 | 0 |
| Total | 63 | 22 |

Below are the details of paper and video submission:

Table 2: Number of Paper and Video Submission by States

| State | Number of Paper Submission | Number of Video Submission |
|----------------------------|----------------------------|----------------------------|
| Wilayah Persekutuan (K.L.) | 4 | 0 |
| Sarawak | 3 | 0 |
| Sabah | 2 | 0 |
| Kedah | 7 | 0 |
| Johor | 1 | 0 |
| Selangor | 6 | 0 |
| Negeri Sembilan | 3 | 0 |
| Perak | 0 | 1 |
| Putrajaya | 0 | 0 |
| Kelantan | 0 | 1 |
| Pulau Pinang | 2 | 0 |
| Terengganu | 7 | 0 |
| Pahang | 1 | 0 |
| Melaka | 2 | 0 |
| Singapore | 0 | 3 |
| Thailand | 0 | 2 |
| Philippines | 1 | 0 |
| Total | 39 | 7 |

3. Training and Development

3.1 Training Preparations and Progress

The paper writing module is an important tool for students to use in order to effectively and efficiently write scientific papers. The YIJ paper writing competition used these modules as a guideline. The Young Inventors Journal Working Group Committee, which consists of professionals and academics, developed the paper writing modules. Training videos were also developed to assist students with paper writing. Students received the modules and training videos through email from ASTI. The modules were also uploaded on ASTI website.

The list of Modules/ Guideline developed for the paper writing competition:

- i) Module 1 A Guide to Write Paper Proposal in an Academic Style Paper
- ii) Module 2 A General Guide to ASTI Paper Writing Competition
- iii) Module 3 Guide to Form a Research Problem Statement
- iv) Module 4 Some Ideas on Topics for Research
- v) Module 5 Overall Guide to Writing an Academic Paper
- vi) Module 6 A Guide to Policy Paper Writing
- vii) Module 7 A Guide to Review Paper Writing
- viii) Module 8 A Guide to Write a Technical Research Paper
- ix) Module 9 A Guide to Write an Invention-Innovation Paper
- x) Module 10 A Guide to Write an Abstract in an Academic Style Paper
- xi) Module 11 Guide to Use Reference Manager (EndNote & Mendeley Software)
- xii) Module 12 How To Do A Video
- xiii) Module 13 How to upload video in Youtube and Video Submission Guideline
- xiv) Guideline to Paper Presentation
- xv) Endnote Reference Manager
- xvi) Mendeley Reference Manager

The list of Videos developed for the paper writing competition 2021:

- i) Training Video 1 Training for Shortlisted Participants
- ii) Training Video 2 A Guide to Policy Paper Writing
- iii) Training Video 3 A Guide to Review Paper Writing
- iv) Training Video 4 What is a Technical Paper
- v) Training Video 5 Invention/Innovation Paper
- vi) Training Video 6 General Tips

We hope that the modules and videos were beneficial to the participants in paper writing and that they will be helpful in future paper writing competitions.

Meanwhile, the YIJ Judging Panel created a guideline (rubric) to assist judges in paper marking, and the same guideline was used to train judges. In addition, training videos were developed for judges to explain the rubrics.

4. Research and Development

4.1 Analysis Summary

Participants in the YIJ Paper Writing Competition were emailed a google survey form. The objective of the survey is to gather information that will be utilised to improve the YIJ paper writing competition in the future.

The survey's summary is as follows:

Participant Survey

According to our survey, the participants were generally pleased with the event. The organizer's modules and training videos were beneficial to the participants in the paper writing competition. Aside from that, the participants had a lot to gain by participating in the competition, and they had learnt a lot from it. The students also expressed an interest in competing in the next paper writing competition as well as other such competitions.

5. YIJ Virtual Prize Giving Ceremony 2021

The YIJ Paper Writing Competition 2021 Prize Giving Ceremony was held virtually on 10th February 2022 at 5.00 p.m. via YouTube.



Ms. Nur Hanis Nadhrah, the Moderator, began the Virtual Prize Giving Ceremony with a welcoming note and introduction.



Ms. Nur Hanis Nadhrah, Moderator

Dr. Mohamed Yunus Yasin, the President of ASTI, gave the opening and welcoming remarks after the Moderator's introduction. He congratulated the winners and requested the other participants to keep trying. Dr Yunus said that the next paper writing competition will be launched soon and invited the participants to participate in the next competition.



This was followed by the speech from Dr. Rusmini binti Ku Ahmad, Rector, Institut Pendidikan Guru Malaysia (IPGM).



Next was a speech by Mr. Yunus Sajad Hussein, the CEO of KLAY EnerSol Sdn. Bhd. who funded the paper writing competition.



After that was a speech by Mr. Pratheep Sandrasaigaran, the Project Director of the Young Inventors Journal Paper Writing Competition 2021.



Next was the judging feedback by the Chief Judge of YIJ 2021, Dr. Jegalakshimi Jewaratnam. She gave her feedback on the participants' paper writing in general.



The Virtual Live event continued with a multimedia presentation of awards to the winning participants in the paper writing and video categories. Winners of the video category were announced first before announcing the winners for the paper writing category.

The following are the details of the winners:

Video Category

Table 3: List of Gold Award Winner

| Team Name | Participant's Name | Paper Title |
|-----------|-----------------------------|---|
| | Karthikeyan Aakarsha Kannan | Development of a prototype |
| Drastirio | Kitti-ampon Chia De En | in order to increase farmers yield so as to reduce mental |
| | Koo Hong Bin Don | strain during Covid-19 |

The Gold Award winner received RM700.00 in cash and an e-certificate.



Team Drastirio Gold Award Winner

Table 4: List of Silver Award Winner

| Team Name | Participant's Name | Paper Title |
|----------------|----------------------|---|
| Galaxy Blaster | Kirans A/P Ganeshrao | Proper education for students in the post covid era in Malaysia |

A RM500.00 cash reward and an e-certificate were given to the Silver Award winner.



Galaxy Blaster (Kirans A/P Ganeshrao) Silver Award Winner

Table 5: List of Bronze Award Winner

| Team Name | Participant's Name | Paper Title |
|-----------|--------------------|---|
| - | Nicolle Ng Xin Yi | Negative impacts of Covid-19 on mental health and wellbeing |

The winner of the Bronze Award earned an RM300.00 cash prize as well as an e-certificate.



Nicolle Ng Xin Yi Bronze Award Winner

Inclusivity Award

After the video category, the there was a special award announced which is the Inclusivity Award. This award was given to an outstanding participant who came up against all odd or difficulty to participate and produce an excellent paper in this competition.

Table 6: List of Inclusivity Award Winner

| Team Name | Participant's Name | Paper Title |
|-----------|------------------------|---|
| - | Isabella Sya Lai Yaein | Improving mental health through Efficacious Electromagnetic Frequency (EMF) radiation protection in an increasingly digitalised post Covid-19 Era |

The Inclusivity Award winner received a cash prize of RM500.00 and an e-certificate.



Isabella Sya Lai Yaein Inclusivity Award Winner

Paper Writing Category Table 7: List of Platinum Award Winner

| Team Name | Participant's Name | Paper Title |
|------------|---|---|
| Katalis | Jazmina Zahraa Binti Zainol | Pomodoro Technique in |
| Ganovation | Nur Rohidatul Quddus Binti Shamsudin Sah | collaboration with stretches for enriching students' study style: P'retch |
| | Gayathri A/P Selvarajoo | 33, 10. 1 1 3 3 3 1 |
| | Nur Farrah Nabeila Binti Adlan | |
| | Nurul Izzati Binti Azman | |

The winner of the Platinum Award received RM1,500.00 as cash prize as well as an e-certificate.



Team Katalis Ganovation Platinum Award Winner

Table 8: List of Gold Award Winner

| Team Name | Participant's Name | Paper Title |
|-----------|---------------------------------|--|
| Sotus | Aida Maisarah Binti Ridzuan | Anxiety and depression among student in Covid-19 situation |
| | Nur Aqeelah Binti Zainal Abidin | btudent in dovid 19 breadion |

The winner of the Gold Award earned an RM1,000.00 cash prize as well as an e-certificate.



Team Sotus Gold Award Winner

Table 9: List of Silver Award Winners

| Team Name | Participant's Name | Paper Title |
|-------------|------------------------------------|--|
| - | Lai Kai Ying | Post Covid19: Reinventing Malaysia future housing architecture for a better social wellbeing and mental health |
| | Ayu Solehah Binti Rasidi | |
| | Sufiyyah Binti Mohamad Saidin | No. 1416 |
| Alexandrite | Nur Amirah Aqilah Binti Mohd Ashri | Multifunctional takenote Techme |
| | Nurul Najwa Binti Aszirun | 100mic |
| | Muhammad Uzair Bin Abdullah | |

The Silver Award winners were given an RM700.00 cash prize and a digital certificate.



Lai Kai Ying Silver Award Winner











Team Alexandrite Silver Award Winner

Table 10: List of Bronze Award Winners

| Team Name | Participant's Name | Paper Title |
|-----------|----------------------------------|--|
| | Hanisah Najiah Binti Harris | |
| IPGKDA | Nur Izzati Binti Mohd Khalil | e-MAPCo: Digital interventions for children's post Covid-19 |
| e-MAPCO | Ayu Mazni Binti Mohd Ghazali | emotional recovery |
| | Nur Umairah Nazirah Binti Mazlan | 3 |
| - | Richard Wijaya | Expose cyberbully tweets using machine learning: A data Science approach |

Bronze Award winners got an RM500.00 cash prize and a digital certificate.









Team IPGKDA e-MAPCo Bronze Award Winner



Richard Wijaya Bronze Award Winner

6. Public Relations/Media

The Public Relations (PR) Department managed the flow of information between the organisers of the paper competition and the general public for the Young Inventors Journal Paper Writing Competition 2021. The public was informed about the YIJ Paper Writing Competition through a press release and a YouTube live video.

- The project poster was sent to the well-wishers.
- The ASTI Newsletter, ASTI website, ASTI Instagram, and ASTI Facebook were used to disseminate information to ASTI's various broadcast list.
- Dr. Mohamed Yunus Yasin was interviewed by TraxxFM on 10th August 2021.

 The purpose of the interview was to create awareness among public about YIJ Paper Writing Competition 2021.

The YIJ Paper Writing Competition 2021 received coverage in media such as The Free Malaysia Today on 9th August 2021.

Below is the article published on The Free Malaysia Today:

Calling entries for ASTI's Young InventorsJournalwritingcompetition

Faye Kwan - August 9, 2021 1:05 PM



ASTI president Mohamed Yunus Yasin (second from left) and FMT chairman Al-Ishsal Ishak sealing their collaboration at an MoU signing ceremony last April.

PETALING JAYA: The Association of Science, Technology and Innovation (ASTI) is calling all budding writers and problem-solvers to take part in its Young Inventors Journal (YIJ) paper writing competition, which was launched today.

The YIJ is a free online research journal for the younger generation to engage in learning through writing research papers and to expose the public to new ideas.

Titled "How to Rebuild a Better World Post-Covid-19: Social Well-being & Mental Health", this year's competition requires participants to look at a specific issue related to the topic and propose what they think would be a viable and equitable solution to urgently address the matter.

ASTI's project partners include KLAY EnerSol, Institute of Teacher Education Malaysia (IPGM) and Malaysian Mental Health Association (MMHA), with Free Malaysia Today as its media partner.

"Social well-being and mental health affects the way we think, feel and act especially in handling the challenges of this pandemic," said IPGM rector Rusmini Ku Ahmad.

She said the competition provided a useful platform for all participants including soon-to-be teachers to "express and navigate their inquisitive creative minds in looking for innovative future solutions in a better post-Covid-19 era".

MMHA president Dr Andrew Mohanraj said engaging youths to talk about social well-being and mental health will help set the template for the new normal.

"Youths experience emotional stress and anxiety about school, education and their future during this pandemic. However, they have also shown remarkable resilience in learning how to cope and move forward by adapting to changes along the way," he said.

Interested participants may join the English writing competition either as an individual or in a team of not more than five. It is open to those aged 18 to 40 years.

The winning papers will be published in an online journal, while other papers that meet the required standards set by the YIJ's rules and regulations will receive a digital certificate of participation.

There will also be a Special Video Category for those aged 17 and below, either individually or as a team of not more than five people.

The prizes up for grabs are:

Paper category – One platinum award of RM1,500, one gold award of RM1,000, two silver awards of RM700 per winner and two bronze awards of RM500 per winner.

Video category – 1st place gold award of RM700, 2nd place silver award of RM500 and 3rd place bronze award of RM300.

7. Accounts Statement of Young Inventors Journal Paper Writing Competition 2021

The Young Inventors Journal (YIJ) Paper Writing Competition 2021 was fully funded by KLAY EnerSol (M) Sdn. Bhd and Tengku Shahrir Tengku Adnan.

| | Amount (RM) |
|--|-------------|
| INCOME | |
| KLAY EnerSol (M) Sdn. Bhd. | 20,000.00 |
| Tengku Shahrir Tengku Adnan | 2,000.00 |
| TOTAL INCOME | 22,000.00 |
| | |
| Less: Expenditure | |
| (1) Module Development and Licensing | 6,970.00 |
| (2) Programme Management Fund | |
| Winning Prize: | |
| Paper Category | |
| Platinum Award (RM 1500 X 1) | 1,500.00 |
| Gold Award (RM 1000 X 1) | 1,000.00 |
| Silver Awards (RM 700 X 2) | 1,400.00 |
| Bronze Awards (RM 500 X 2) | 1,000.00 |
| Video Category | |
| Gold Award (RM 700 X 1) | 700.00 |
| Silver Awards (RM 500 X 1) | 500.00 |
| Bronze Awards (RM 300 X 1) | 300.00 |
| Inclusivity Award | 500.00 |
| Judging Honorarium | 1,000.00 |
| Total | 14,870.00 |
| 3) Operations and Project Management Fund | |
| Project Manager (Wages, EPF, SOCSO, Insurance) | 4,800.00 |
| Project Officer | 10,800.00 |
| Evaluation | 1,000.00 |
| Reporting | 1,000.00 |
| Total | 17,600.00 |
| | |
| Total Expenditure | 32,470.00 |
| Excess of (Expenditure)/Income * | -10,470.00 |

^{*} The excess of expenditure was paid by the Association of Science, Technology and Innovation (ASTI). Part of the salaries due to staffs was also fully absorbed by ASTI.

8. Judging

A total of 29 judges from various backgrounds which includes professionals and academics agreed to volunteer and participate in the paper writing competition as judges. The YIJ Paper Writing Competition 2021 judging team was headed by a team called the 'Judging Panel'. The judging panel's job was to create the judging rubrics and oversee the judging process. The judging panel created the rubrics for paper/video marking and conducted online viva for shortlisted teams. Dr. Jegalakshimi Jewaratnam, Chief Judge of the YIJ Paper Writing Competition 2021, led the judging team and panel. The judges assessed the participants' papers/videos and online viva against the guidelines' requirements. The Judging Team's decisions were the final. The Judges were independent from the organizing committee.

Judges Training

Training videos were developed to brief the judging criteria to the judges to help them in paper/video marking. The videos were emailed to the judges upon distribution of papers/videos for marking.

Proposal Marking

All participations were required to send a paper proposal for their paper/video before they start writing their full papers or developing their videos. All the paper proposals received were sent for marking, which was held from 14th October 2021 until 27th October 2021. Two judges reviewed each paper proposal. All 65 paper proposals received were shortlisted for paper writing and video development.

Paper Marking

The marking of the 39 papers and 7 videos submitted by the participants was done by a total of 29 judges. Two (2) judges independently reviewed all of the papers and videos submitted. Paper and video marking was held from 22nd December 2021 until 12th January 2022. The top six (6) papers were shortlisted after the paper marking was completed. The top six teams/individuals were invited to participate in an online viva which was announced through e-mail on 14th January 2022.

Online Viva

On the 22nd of January 2022, an online viva was held using Zoom Meet. The online viva was conducted by four (4) judges from the judging team to decide the Bronze, Silver, Gold, and Platinum Award winners. They were Dr. Jegalakshimi Jewaratnam, Pn. Nurul Nadiah Hamidon, Ms. Ng Yin Kuan and Mr. Satya Narayanan. The Bronze, Silver, Gold, and Platinum Award winners were virtually announced at 5.00 p.m. on 10th February 2022.

Judges received a digital certificate as well as a token of appreciation for their valuable time and contribution.

9. SWOT Analysis

The following is the SWOT analysis and recommendations for future improvements to the YIJ paper writing competition that were suggested via google form.

Strength:

- ASTI has a well-developed network. Judges were able to be found for the competition, and the judges were the competition's strength.
- The competition's key strength was IPGM's support.
- The competition was well-coordinated and managed.
- IPG students and other young writers were given a great opportunity.
- Participants found the modules, training videos, and templates provided to be helpful.
- Since the competition was held online, it was designed well.
- The funder for the competition was very supportive.
- The media partner helped to promote the competition.

Weakness:

- The time for promotion was limited for example IPGM required additional time to promote the competition to its pupils.
- Due to a miscommunication between the organiser and the participants, several participants submitted a full paper at the paper proposal stage when only a paper proposal was required.
- Participation for video category was not encouraging.

Threat:

- To have long-term and consistent funding.
- Malaysians' reading and writing culture are decreasing in general.

Opportunity:

- To increase the number of participants who enter the paper writing competition.
- The next paper writing competition should focus on topics such as economic and agriculture related to Covid-19.
- More public and stakeholder input is sought for a paper writing competition on economics and agriculture related to Covid-19.
- More participation from University students for paper competition and school students for video competition must be encouraged.

9.1 SWOT Conclusion

Received positive reception from participants, and it had the potential to grow into national and international level.

9.2 Recommendations

- To hold a press conference to highlight the suggestions proposed by the participants. The press conference will be accompanied by newspaper article publication.
- To look for funding from a variety of sources.
- To publish selected YIJ competition papers on Young Inventors Journal website.

 The next paper writing competition should focus on economic and agriculture post Covid-19.
- More promotions/trainings/surveys are needed to encourage the writing culture among students.

10. Conclusion

The YIJ Paper Writing Competition 2021 was a successful event for ASTI. There were 85 teams/ individuals registered for the competition, and ASTI received 65 paper proposals. A total of 39 full papers and 7 videos were submitted. After the success of the first and second paper writing competitions organised by YIJ and ASTI in 2019 and 2020, respectively, this is the third time the competition has been held. The third paper writing competition received a very good response, and we will continue to organise the next series of paper writing competitions in the future. This paper writing competition allowed participants to contribute to the community by proposing solutions to issues relating to social well-being and mental health that our society faces. Apart from that, the competition helped the participants in developing critical and systematic thinking skills. It also aided in the development of the discipline required for academic writing.

We would like to thank the funder, judges and volunteers in making this competition a success.

"The key to a healthy life is having a healthy mind."

hard Davidson (Professor of psychology and psychiatry at the University of Wisconsin—

– Richard Davidson (Professor of psychology and psychiatry at the University of Wisconsin–Madison)

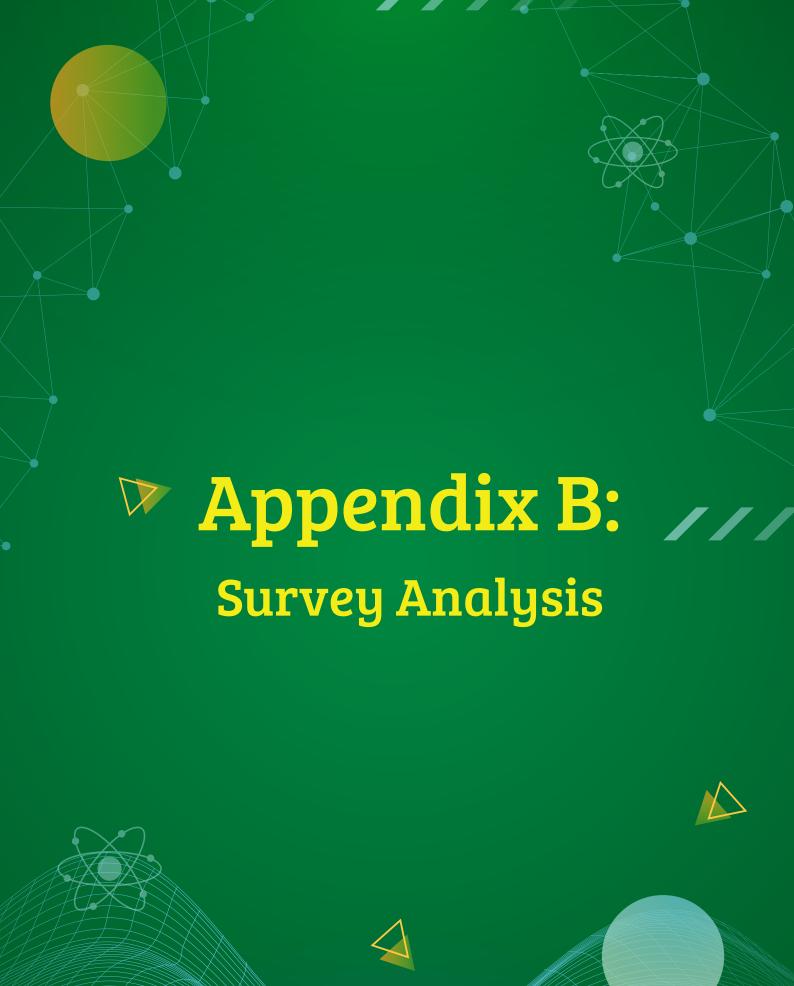


Table 11: Institutes that submitted Papers

| No. | Institute Name | State |
|-----|--|-----------------|
| 1 | Institut Pendidikan Guru Kampus Sultan Abdul Halim | Kedah |
| 2 | IPG Kampus Dato' Razali Ismail | Terengganu |
| 3 | IPG Kampus Darulaman | Kedah |
| 4 | IPG Kampus Kent | Sabah |
| 5 | Manipal International University | Negeri Sembilan |
| 6 | Asia Pacific University | Kuala Lumpur |
| 7 | IPG Kampus Perempuan Melayu Melaka | Melaka |
| 8 | IPG Kampus Bahasa Melayu | Kuala Lumpur |
| 9 | University of Malaya | Kuala Lumpur |
| 10 | IPG Kampus Sultan Mizan | Terengganu |
| 11 | Alabel National Science High School – Regional Science High School For Region XII | Philippines |
| 12 | Sunway University | Selangor |
| 13 | Monash University Malaysia | Selangor |
| 14 | IPG Kampus Pendidikan Teknik | Negeri Sembilan |
| 15 | University Tun Hussein Onn Malaysia | Johor |
| 16 | University of Malaysia Sarawak | Sarawak |
| 17 | UCSI University | Kuala Lumpur |
| 18 | HELP University | Selangor |

Table 12: Schools that submitted Videos

| No. | Institute Name | State |
|-----|----------------------------------|-----------|
| 1 | School of Science and Technology | Singapore |
| 2 | Phayaramwitthaya School | Thailand |
| 3 | SMK St. Bernadette's Convent | Perak |
| 4 | Sekolah Menengah Agama Falahiah | Kelantan |



Participants' Survey Analysis

A google form was used to conduct the survey of the participants. The participants received the google link survey form via email. The survey was completed by 32 participants in total. The survey's analysis is summarised and discussed below.

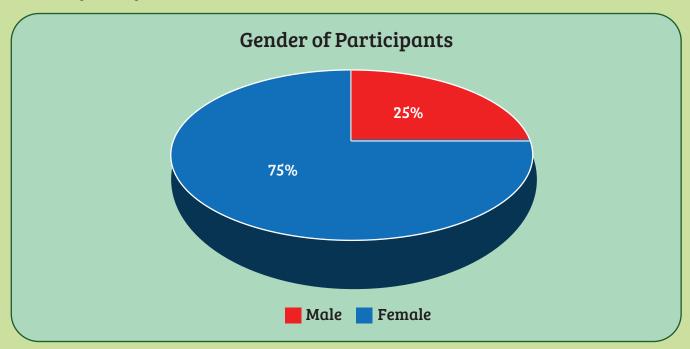


Figure 1: Gender of Participants

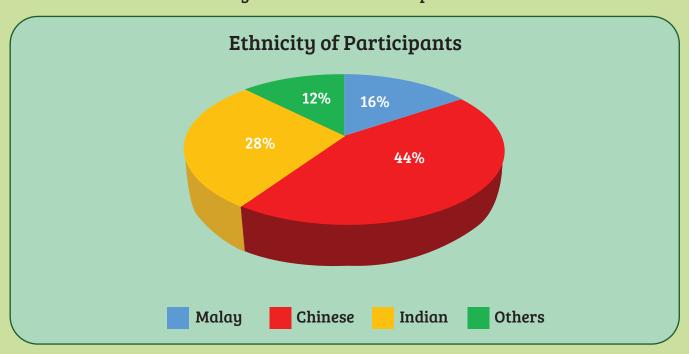


Figure 2: Ethnicity of Participants

Figure 1 depicts the demographics of the participants (gender), whereas Figure 2 depicts their ethnicity. Figure 1 shows that 75% of the participants in the YIJ Paper Writing Competition were female, while the other 25% were male. According to Figure 2, Chinese ethnicity accounted for 44% of the participants, whereas Indian ethnicity accounted for 28%. Participants of Malay ethnicity made up 16% of the total. Other ethnicities represented 12% of the participants, including Thai, Iban, Melanau, and Filipino.

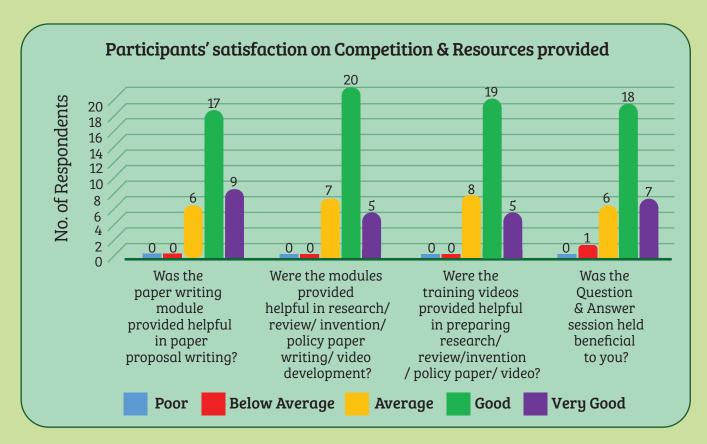


Figure 3: Participants' satisfaction on Competition & Resources provided

Figure 3 shows the participants' satisfaction with the competition and resources provided. The paper writing modules provided for paper proposal and paper writing/video development, as well as the training videos provided for paper writing/video development and the question and answer session held, were all well received by the majority of the participants. Although there were a few participants who rated average, the majority of the participants rated 'Good' and 'Very Good.'

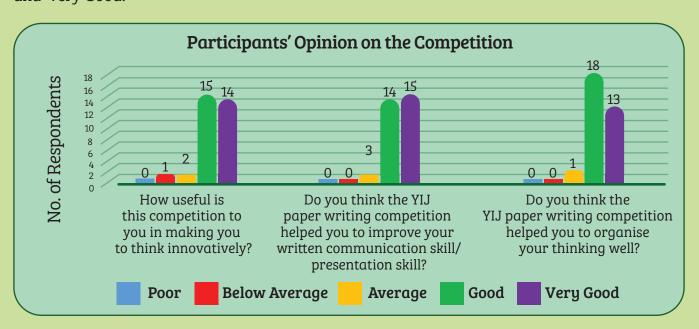


Figure 4: Participants' Opinion on the Competition

Figure 4 is on participants' opinion on the competition. The majority of the participants stated that the competition was beneficial to them in terms of encouraging them to think innovatively, improving their written communication skills, and helping them to organise their thoughts. More than 90% of the participants rated 'Good' or 'Very Good' for these survey questions.

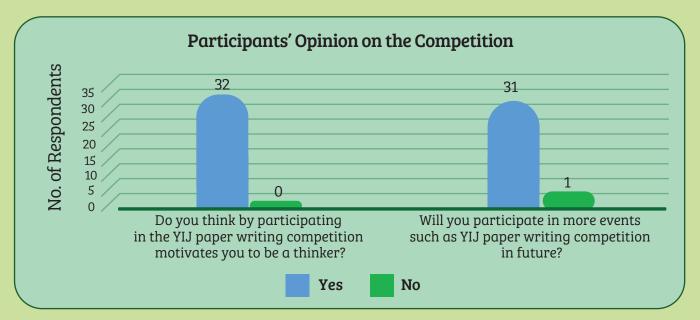


Figure 5: Participants' Opinion on the Competition

Figure 5 also shows participants' opinion about the competition. All of the participants acknowledged that taking part in the YIJ paper writing competition had inspired them to be a thinker. Meanwhile, approximately 97% of the participants stated that they plan to participate in more events in the future, such as the YIJ paper writing competition.

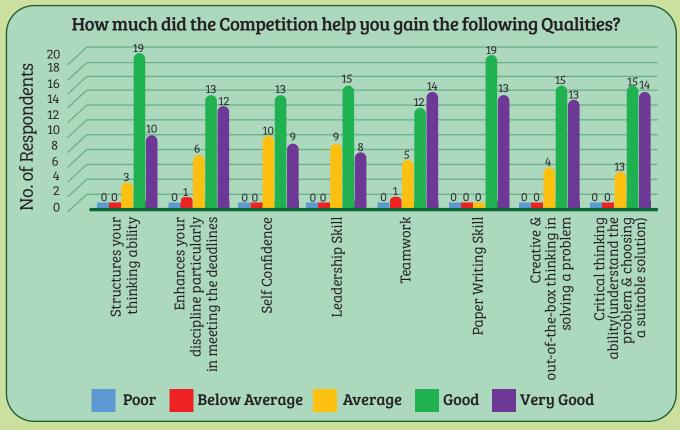


Figure 6: How much the competition had helped the participants gain the following qualities

Figure 6 explains how much the competition helped the participants gain certain qualities. After participating in the Paper Writing Competition, at least 78% of participants said they have structured their thinking ability, enhanced their discipline, especially in meeting deadlines, gained teamwork, paper writing skill, critical thinking ability, and are creative & out-of-the-box thinking in solving a problem. Only about 69% of participants, on the other hand, have improved their leadership skills and self-confidence.

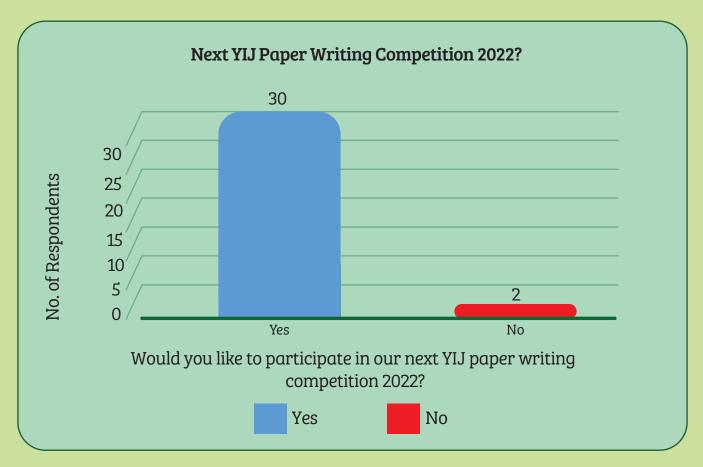


Figure 7: Next YIJ Paper Writing Competition 2022

The graph above (Figure 7) shows students' desire to participate in the upcoming paper writing competition. About 93.8% of the participants expressed an interest in competing in the future YIJ paper writing competition.

We also asked the participants an open-ended question, and their responses (in bullet points) are as follows:

- 1) Do you think the whole duration (6 weeks) given for preparing the research/ review/invention/ policy paper/video for competition is sufficient?
 - Yes it's sufficient.
 - It's enough to get a simple journal done but if you have a bigger vision of that topic than it might not be sufficient enough.
 - Additional 1 or 2 weeks would be better.
 - Timetable could be arranged more neatly (eg: conduct briefing after registration deadline).
 - Not really.



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