6978

May 2, 2022

REGIONAL MEMORANDUM
No. 413 s. 2022

VIRTUAL 2022 REGIONAL SCIENCE, TECHNOLOGY, AND MATHEMATICS FAIR (RSTMF)

To: Schools Division Superintendents
School Heads
All Others Concerned

1. Relative to the attached DepEd Memorandum No. 38, s. 2022, re: National Science and Technology Fair (NSTF) 2022, this Office, through the Curriculum and Learning Management Division, announces the conduct of the Virtual 2022 Regional Science, Technology, and Mathematics Fair (RSTMF), dubbed as *PaSCIdungog han MATHkarit*, with the theme "Expanding the Horizon: Futures of STEM" on **June 27 – July 1, 2022**, hosted by Eastern Samar Division.

2. This year's RSTMF aims to:
   a) promote Science, Technology, Engineering, and Mathematics consciousness;
   b) recognize learner-achievers in the field of Science, Technology, Engineering, and Mathematics;
   c) develop among the youth resiliency, innovation, and creativity amid the changing world; and
   d) showcase competence of the learners in addressing community problems for sustainable development and to maximize their potentials of being inquisitive and creative in dealing with real life problems.

3. In line with the NSTF 2022 and with the restriction imposed due to the health crisis, the conduct of the 2022 RSTMF will adopt a different set of competition and guidelines. This will be held using online platform in coordination with the host division office and partners. The Virtual RSTMF will banner the following events and competitions:

   a. *Siyensikula* – an original video competition focusing on science, mathematics, and engineering concepts.
   b. *Likha* – a research proposal competition in Life and Physical Sciences, Robotics and Intelligent Machines, and Mathematics and Computational Sciences.
   c. *#SteMTokperiments* – a Tiktok Science Experiment Competition

d. *PaSCIdungog han MATHkarit* - awarding of the learner-achievers who have displayed outstanding accomplishments, such as winning in national and international competitions, to include those recognized by accredited organizations in the field of Science, Technology, and Mathematics.

4. The Schools, Districts, and Divisions may conduct their own selection screening process for their entries and participants to the RSTMF. Participation in the school, district, and division, and regional Science, Technology, and Mathematics Fair is voluntary.

5. The virtual RSTMF is open for public. The competitions follow the NSTF contests guidelines. However, there shall only be one (1) official entry per category to the contests from each Division and the Regional Science High School. The *Likha* Competition will be conducted with a 5-minute presentation of the research proposal and maximum of 20-minute question-and-answer by the BOJ members and researchers.

6. The concerned Schools Division Superintendents shall indorse the official entries and achievers and send it through email at clmd.region8@deped.gov.ph on or before **June 20, 2022**. The Eastern Visayas Regional Science High School entries must be separately indorsed by the SDO Catbalogan City. Substitutes shall not be allowed.

7. The documents required for submission shall be placed in a Google Drive, with file folders per category, correctly named following the subject format, and shared to clmd.region8@deped.gov.ph cc: ryan.tiu@deped.gov.ph and sarah.cabaluna@deped.gov.ph. Non-submission of any of the required documents of the competition entries will automatically mean disqualification. (*See Enclosure 4*)

8. The specific guidelines for the conduct of the RSTMF, Program of Activities, List of Regional Management Team (RMT), Technical Working Group (TWG), List of Official Participants template, and other related documents can be found in the attached enclosures.

9. The link to the virtual 2022 RSTMF and the official posting of entries will be given through another issuance.

10. A planning conference with the Regional and Division Education Program Supervisors for Mathematics and Science will be held on May 2, 2022 to discuss preparations relative to the conduct of the 2022 RSTMF. The meeting link will be shared through the group's Messenger.

11. The Regional and Division TWGs would likewise be conducting both onsite and online meetings before, during, and after the activity on later set dates.

12. Strict adherence to National and local IATF protocols must be observed in all levels of the competition such as, but not limited to the mandatory wearing of mask and face shield by all participants and members of the Technical Working Groups.

13. The technical management team and working groups and the participants involved in this activity who shall render services, report for duty, or accomplish work beyond office hours such as on weekends, school year vacation, or holidays in the exigency of service shall earn service credits subject to the existing and applicable rules and regulations.

14. There shall be NO registration fee. The expenses related to the conduct of the RSTMF 2022 such as communication allowance, prizes and awards, food, contest and advocacy materials, and honoraria of members of the Screening Committee, Board of Judges, and external or non-DepEd resource persons shall be charged to the downloaded Program Support Fund, which shall be further transferred to the SDO Eastern Samar, while the contest-related expenses of the participants to Local/School/Division funds or other sources subject to the usual accounting and auditing rules and regulations.

15. For more information, all concerned may contact Ryan R. Tiu, EPS (Science), or Sarah S. Cabaluna, EPS (Mathematics), at clmd.region8@deped.gov.ph.

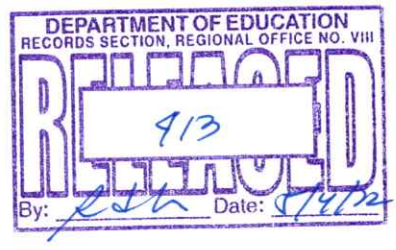
16. Immediate dissemination of and compliance with this Memorandum are desired.

EVELYN R. FETALVERO, CESO IV
Regional Director

Enclosures: As stated
References: As stated
To be indicated in the Perpetual Index under the following subjects:

FAIR MATHEMATICS RSTMF SCIENCE TECHNOLOGY

CLMD-RRT



Enclosure 1 to the Regional Memorandum No. _____, s. 2022

Regional Management Team (RMT)

Chairman:	Evelyn R. Fetalvero – Regional Director
Vice-Chairman:	Bebiano I. Sentillas – Assistant Regional Director
Members:	Harvie D. Villamor – Chief, CLMD
	Ryan R. Tiu – EPS, CLMD
	Sarah S. Cabaluna - EPS, CLMD
	Joy B. Bihag – EPS, CLMD
	Nova P. Jorge - EPS, CLMD
	Alfredo P. Café - EPS, CLMD
	Dandy G. Acuin – EPS, CLMD
	Amenia C. Aspa - EPS, CLMD
	Dean Ric M. Endriano - EPS, CLMD
	Gertrudes C. Mabutin, EPS, CLMD
	Ernani S. Fernandez, Jr., EPS, CLMD
	Albert Jim Lagado, ITO, ICTU
	Jasmin F. Calzita – PDO, PAU
	Floramay Bacus – PDO, PAU

Technical Working Groups:

1) Registration and Documents Management Committee
   - Chair: Sarah S. Cabaluna
   - Members: Ryan R. Tiu with ICTU and PAU personnel
     Eastern Samar TWG members
2) Program, Documentation, and Logistics Committee
   - Chair: Rhea Coles
   - Co-chair: Robert Guira
   - Members: Ryan R. Tiu, Sarah S. Cabaluna
     Eastern Samar TWG members
3) Contest-Facilitators
   a) Siyensikula – Ryan R. Tiu, Amenia C. Aspa
   b) Likha
      a. Life Science – Dean Ric M. Endriano, Jasmin F. Calzita, Miguel Dumas, Bruna Epiz, Aurora Amboy
      b. Physical Sciences - Joy B. Bihag, Gertrudes C. Mabutin, Glendo Carido, Joy Saldana, Carmen Lim, Santiago Fabula Jr.
      c. Robotics and Intelligent Machines - Ernani S. Fernandez, Jr., Albert Jim Lagado, Hazel Maraviles, Juliet Montebon, Charity Nogra

d. Mathematics and Computational Sciences - Sarah S. Cabaluna, Alfredo P. Café, Elizabeth Deligero, Joshua Sherwin Lim, Rommel Tan, Sr.

c) *#SteMTokperiments* - Nova P. Jorge, Dandy G. Acuin, Arnulfo Banzon, Gina Palines, Gina Diloy

4) Results, Awards, and Certificates Committee

Chair:	Ryan R. Tiu
Co-Chair:	Sarah S. Cabaluna
Members:	CLMD personnel
	Rhea Coles and Robert Guira
	Eastern Samar TWG members

*Host SDO Special Committees:

Secretariat	Invitation & Communication
Program Management	Finance Procurement
Health Safety & Sanitation	Tech-Support and Developers

Enclosure No. 2

Terms of Reference

1) Registration and Documents Management Committee
   - Ensures the smooth and systematic enlistment of learners, advisers, and guests
   - Ensures that participants' registration and attendance form links are provided
   - Coordinates with the program lead to provide a complete and exact registered number of participants and their confirmation letter.
   - Ensures that BOJ are oriented of their tasks and provides the judging forms
   - Coordinates the needs and concerns of BOJ
   - Secures all score sheets and manuscripts
   - Assists the judges until the final deliberation
   - Tabulates the scores of all judges per category
   - Ensures accurate and timely results submission

2) Program, Documentation, and Logistics Committee
   - Provide online programs and advocacy materials
   - Ensures that virtual platform is prepared and managed for the activity
   - Designs the setup of virtual platform
   - Ensures that the AVP for introduction of BOJs are prepared
   - Create video presentation and other pictorial documentation on the conduct of the activity
   - Ensures that all needed facilities are available and functioning well
   - Makes arrangement for the meals for the whole duration of the activity
   - Ensures an organized and well-executed program flow
   - Coordinates with other committees regarding the program arrangements
   - Arranges the flow of the program accordingly
   - Ensures that emcee/s are prepared for the activity
   - Ensures that all AVP's are prepared for the activity

3) Contests Facilitators
   - Ensure the completeness and correctness of entries for the assigned categories
   - Keep the time of the presentation and other related activities of the contest
   - Facilitate the flow and conduct of the contests: preliminary activities, checking of participants/entries, acknowledging of judges, activity proper, closing activity
   - Record and report the activity proceedings
   - Answer the concerns of the participants and BOJ members
   - Coordinate with the Regional and Host Division Management Teams

4) Results, Awards, and Certificates Committee
   - Ensures the accuracy, adequacy, and availability of all medals, trophies, and tokens
   - Ensures that all certificates are printed out or ecopy ready
   - Creates the PowerPoint presentation of results
   - Coordinates closely with the Program Committee regarding announcement of winners and awardees
   - Ensures that extra medals, trophies, and tokens are available in case the need for replacement arises and safeguards the unclaimed medals or trophies
   - Ensures that Certificate of Recognition is available and properly distributed
   - Keeps complete records as to name of participants on the results of the contest.
   - Tabulates, reviews, ensures that all results are exactly computed, and consolidates the results of the contest submitted by the board of judges.
   - Announces the results of the contests

Enclosure No. 3

Program of Activities

Host: SDO Eastern Samar

DATE	ACTIVITY
May 2, 2022	Planning Conference with the RO and SDO Science and Mathematics EPSs
May 16, 2022 (*and other dates set by SDO E. Samar*)	Planning Conference with Eastern Samar TWG
May 30 – June 3, 2022	School and Division Levels Screening
June 20, 2022	Submission of the entries and other required documents
June 21 - 24, 2022	Organization of entries to the Official FB page of RSTMF Screening of the entries for all contests' categories
June 27-30, 2022 • June 27 • June 28 • June 29 • June 30	Judging of official entries • *Siyensikula* • *Likha* (Individual) • *Likha* (Team) • *#SteMTokperiments* } 5 min. presentation and 15 min. Q&A
July 1, 2022	2022 RSTMF • Preliminaries • Messages • Awarding of Learner-Achievers • Announcement and Awarding of Winners
July 1 - 10, 2022	Provision of Technical Assistance to the entries for NSTF Revision/Enhancement of video entries Uploading of entries and submission required documents
July 15, 2022	Submission of requirements for NSTF

Enclosure No. 4

List of Documents for Submission

File / Document	Subject Format
a. Overall	
a.1. Confirmation letter	Division_ConfiLetter
a.2. List of Official Entries	Division_List of Entries
a.3. Parent's Consent	Division_PC
b. For *Siyensikula:*	
b.1. Copy of the video entry	SIYENSIKULA_DIVISION_VideoTitle
b.2. Name of the participant, video title, and YouTube video link attachment of the video entry;	SIYENSIKULA_DIVISION_EntryInfo
b.3. A signed pdf file of the video script along with the References in Chicago Manual of Style; and	SIYENSIKULA_DIVISION_Script
b.4. Certification of content originality and permission for use as learning resource.	SIYENSIKULA_DIVISION_Cert
b.5. Picture of the learner(s) per entry/category	LastName_FirstName_MI
c. For *Likha*	
c.1. Project Form and other relevant files in PDF format	LIKHA_DIVISION_CATEGORY
c.2. Picture of the learner(s) per entry/category	LastName_FirstName_MI
d. For *#SteMTokperiments*	
d.1. Copy of the video entry	*#STEMTOKPERIMENTS*_DIVISION_CATEGORY _VideoTitle
d.2. Name of the participant, video title, and Tiktok video link attachment; and	*#STEMTOKPERIMENTS*_DIVISION_CATEGORY _EntryInfo
d.3. A signed pdf file of the video script along with the References in Chicago Manual of Style	*#STEMTOKPERIMENTS*_DIVISION_CATEGORY _Script
d.4. Picture of the learner(s) per entry/category	LastName_FirstName_MI
e. For *PaSCIdungog han MATHkarit*	
e.1. List of Learner-Achievers (in PPT format, which includes the learner's name, school, achievements, and picture)	*PaSCIdungog*_DIVISION_Achievers

Enclosure No. 5

(SDO Header)

CONFIRMATION LETTER

_____
(date)

EVELYN R. FETALVERO, CESO IV
Regional Director
DepEd Regional Office VIII
Candahug, Palo, Leyte

Madam:

May I respectfully submit the List of our Official Participants to the 2022 Regional Science, Technology, and Mathematics Fair (RSTMF), of which the submission of entries is on **June 20, 2022**.

Name	Designation / Grade Level	School	Contest / Category

Very truly yours,

_____
Schools Division Superintendent

Enclosure No. 6

Photograph, Video, and Voice Recording Consent, Waiver, Indemnity and Release Form

I hereby grant permission to the DepEd Regional Office 8, Candahug, Palo, Leyte and its representatives to:

- ❑ photograph
- ❑ video record
- ❑ video stream/live stream/web stream
- ❑ record my voice
- ❑ upload in the Facebook Page: DepEd Region 8 RSTMF the Contest/Video Material(s)

at the

Name of event: DepEd Region 8 Regional Science, Technology Mathematics Fair 2022
Location: Virtual via DepEd Region 8 RSTMF Facebook page
Date: June 27 – July 1, 2022

For the purpose/s of:

- ❑ Uploading the material/s as open educational resource/s in the DepEd Region 8 RSTMF facebook page
- ❑ Using the material/s as open educational resource/s for DepEd Region 8 RSTMF facebook page
- ❑ Sharing the materials as open educational resource/s with various learners from different institutions
- ❑ Keeping the recording for documentation purposes

By permitting DepEd RO8, through the 2022 RSTMF Technical Working Group, to perform any of the above activities, I understand and agree that the following pieces of personal and sensitive personal information ("personal information"), as defined in Republic Act No. 10173 ("DPA"), shall likewise be processed by DepEd RO8 2022 RSTMF TWG:

Personal Details

1. Picture
2. Name: _____
3. Position: _____
4. Affiliation/Office/School: _____
5. (For Learner-Achievers) List of Achievements in STEM

I allow the DepEd RO8 and its representatives the rights to (*put a cross on appropriate box*)

- ❑ reproduce
- ❑ keep on record
- ❑ exhibit/ display
- ❑ broadcast/distribute
- ❑ create derivative works of these images and recordings in any media now known or later developed.

I agree and understand that my personal information may be processed both by way of computer media and on paper, in compliance with the rules on data protection, including those relating to data security.

I agree that all such portraits, pictures, photographs, video and audio recordings, and any reproductions thereof, and all plates, negatives, recording tape, and digital files shall remain the property of the DepEd RO8 unless otherwise noted. I also agree that all such documents, including the personal information contained therein, shall be retained or stored for as long as the purposes for which they are being processed have not been satisfied, and that they shall be retained or stored in Office's CLMD and ICT Unit.

I understand that, as a data subject, I have the right to access personal information, the right to make corrections to such information, the right to object to the processing of my personal information, the right to block or erase my personal information, the right to be informed about the processing of my personal information, the right to damages, and the right to lodge a complaint with the National Privacy Commission. I also understand that, in the event that I do exercise any of these rights, 2022 RSTMF TWG may be unable to fulfill its obligations to me.

Should I have any questions or concerns about my personal information, I may address them to:

RSTMF 2022 Technical Working Group
RO VIII - CLMD
SDO Eastern Samar
clmd.region8@deped.gov.ph
domingo.payod@deped.gov.ph

I warrant that the conditions herein are explained to me thoroughly and that I am competent in my own name insofar as this consent is concerned.

_____
Printed name and Signature of Parent/Participant

Date of Signing:

Address:

Office/Division/School:

Republic of the Philippines
Department of Education

26 APR 2022

DepEd MEMORANDUM
No. 038 , s. 2022

NATIONAL SCIENCE AND TECHNOLOGY FAIR 2022

To: Undersecretaries
Assistant Secretaries
Minister, Basic, Higher, and Technical Education, BARMM
Bureau and Service Directors
Regional Directors
Schools Division Superintendents
Public and Private Secondary School Heads
All Others Concerned

1. Navigating the education landscape amid the COVID-19 pandemic has intensified the drive for innovations in teaching and learning. Advancements in the various fields accentuated by technology are at the forefront of revolutionizing the approaches to transition to the new normal. This has magnified the role of the sciences and research in providing specific and effective solutions to global issues and challenges.

2. The Department of Education (DepEd), through the Bureau of Curriculum Development (BCD), announces the conduct of the **National Science and Technology Fair (NSTF) for School Year (SY) 2021-2022** with the theme, **Expanding the Horizon: Futures of STEM**. However, with varied levels of COVID-19 restrictions being implemented across the country, the conduct of the NSTF 2022 will be held virtually in coordination with the regional offices and partners.

3. This year's NSTF continues to empower the youth and cultivate **innovation, and** creativity **amid the changing world**. The NSTF also aims to showcase the competence of the learners in addressing community problems for sustainable development and to maximize their potential of being inquisitive and creative in dealing with real-life problems.

4. The Virtual NSTF will banner the following events and competitions:

   a. *Siyensikula* – an original video creation competition
   b. *Likha* – a Research Proposal Competition
   c. *#SteMTokperiments* – a Tiktok Science Experiment Competition
   d. ***A**gham**B**ayani**J**uan* – a public community exhibition of partners in Science, Technology Research, and Innovation
   e. STEM Academy – a conference for learning and development for students and teachers on innovation, creativity, and excellence in Science and Research

5. Participation in the school, division, regional and national Science Technology Fair is voluntary. The Regional Offices may conduct their own selection and screening process for their entries and participants in the National Science and Technology Fair. The announcement of national finalists and awarding ceremony will be on **August 1-5, 2022**.

6. Strict adherence to National and local Inter-Agency Task Force (IATF) protocols must be observed at all levels of the competition such as, but not limited to, the mandatory wearing of masks by all participants and members of the Technical Working Committee (TWG).

7. All expenses related to the conduct of the NSTF 2022 such as communication allowance, prizes, cash awards, and honoraria of members of the Screening Committee, Board of Judges, and external or non-DepEd resource persons in the national level STF shall be charged to the Bureau of Curriculum Development (BCD) Fund, whereas expenses related to video production including notarial services, communication allowance of the learners/coach, etc., can be charged to local funds of the school/schools division offices (SDOs), subject to the usual accounting and auditing rules and regulations.

8. The decision of the National Board of Judges in the evaluation and deliberation of entries is final and irrevocable.

9. The documents below are enclosed for the information and guidance of all concerned.

Enclosure No. 1	*Siyensikula*-Mechanics
Enclosure No. 2	*Siyensikula*-Criteria/Peer to Peer Evaluation Tool
Enclosure No. 3	*Siyensikula* Waiver and Certification
Enclosure No. 4	*Likha* – Mechanics and Criteria
Enclosure No. 5	*Likha* – Rubric Evaluation Tool (Screening)
Enclosure No. 6	*Likha* – Rubric Evaluation Tool (Final Judging)
Enclosure No. 7	*Likha* – Project Proposal Template
Enclosure No. 8	*STEM*tokperiments – Mechanics and Criteria
Enclosure No. 9	Timeline NSTF 2022

10. For more information, please contact **Ms. Anna Liza M. Chan**, Supervising Education Program Specialist, Bureau of Curriculum Development - Special Curricular Programs Development Division, 3rd Floor, Bonifacio Building, Department of Education Central Office, DepEd Complex, Meralco Avenue, Pasig City through email at nstf@deped.gov.ph or telephone numbers (02) 8632-7746 and (02) 8635-9822.

11. Immediate dissemination of this Memorandum is desired.

LEONOR MAGTOLIS BRIONES
Secretary

Encls.: As stated
Reference: DepEd Memorandum No. 053, s. 2021
To be indicated in the Perpetual Index
under the following subjects:

CELEBRATIONS AND FESTIVALS
CONTESTS
LEARNING AREA, SCIENCE
SCHOOLS
STUDENTS

(Enclosure No. 1 to DepEd Memorandum No. 038, s. 2022)

SIYENSIKULA MECHANICS

1. This competition is open to all Junior and Senior High School students from both Public and Private Schools in the country. A maximum of three (3) students may collaborate on a single video entry. ***Collaboration of the participants and coaching may be done remotely such as, but not limited to, online meetings, email messaging, and all available online collaboration platforms.***

2. The participant/s must discuss a difficult topic under Physical Sciences, Life Sciences, Mathematics, or an Engineering concept in a clear, creative, and engaging manner through a video presentation that is not more than three (3) minutes. The participants can discuss the topic in English and/or Filipino.

3. All contents in the video must be original and are owned by the participant/s. Entries may include personal experiences and thoughtful observations. Videos must reflect that the student has carefully reviewed and examined the topic.

4. All creative visual tools such as animations, simulations, physical demonstrations, or visual aids are allowed. Entries with photos and videos which are derivative works will automatically be **disqualified.**

5. Each region may send a **maximum of two (2) official entries** to the National Siyensikula Competition. They shall be properly endorsed by the Regional Director through an endorsement letter on or before the deadline of submission at the national level on July 15, 2022.

6. Entries must be submitted via email at **nstf@deped.gov.ph** following this subject format: "SIYENSIKULA_REGION_VideoTitle" (ex. SIYENSIKULA_ROVIII_Ligtas).

7. The email should include: (1) the name of the participant, (2) a Youtube video link attachment of the video entry, and (3) a pdf file of the video script along with the references in the Chicago Manual of Style. Non-submission of any of the required documents for the competition category will automatically be disqualified.

8. There will be two (2) stages in the judging process:

   a. PEER-TO-PEER REVIEW - The Peer-to-Peer Review is the first phase of judging. Entries will be reviewed and scored by at least five (5) other contestants. The Peer-to-Peer review process is an educational experience and desires with good faith in providing an honest and sincere assessment for each entries. The contest committee will assign peers who will review the entries of other contestants. The project with the highest score will receive a special award. The criteria for judging are found in *Enclosure No. 2.*

b. EVALUATION AND SELECTION COMMITTEE REVIEW – The Evaluation and Selection Committee will review and score all the video entries based on the criteria for judging found in *Enclosure No. 2.*

9. The evaluation results of the Evaluation and Selection Committee are **independent** of the results of the Peer to Peer Evaluation. The entry with the highest percentage in the final stage shall be declared as Champion and will be given a medal and a certificate.

10. All the winning entries will receive certificates and will be posted on the official Facebook page of the National Science and Technology Fair and DepEd Philippines with the permission and proper acknowledgment of the creators/participants. Participants must submit a duly notarized Certification. *(Enclosure No. 3)*

(Enclosure No. 2 to DepEd Memorandum No. 038, s. 2022)

Siyensikula - Rubric Evaluation Tool						
Entry No.						
Criteria	Points					
	0	1	2	3	4	5
Engagement	Failed to establish engagement and did not hold viewer's attention.	Somewhat interesting but did not hold viewer's attention for the entire length of the video.	Fairly interesting and held viewer's attention for the entire length of the video.	Interesting and engaged the viewer throughout run of the video.	Very interesting and throughout the video, viewer was excited to see what would come next.	Captivating and made the viewer want to watch other videos made by the entrant.
Illumination	Failed to explain the subject matter clearly; video did not help viewer understand subject matter.	Explanation was at times confusing and viewer was not able to understand much of the subject matter.	Explanation was fairly clear but covered only general concepts.	Explanation was clear and covered some topics beyond general concepts.	Explanation was very clear and covered many topics beyond general concepts.	Viewer was able to fully understand the explanation, and video provided a deep dive into the intricacies of the subject matter.
Creativity	No elements of the video demonstrated a creative approach to explaining the subject matter.	The explanation was standard and contained one or two resourceful elements.	Parts of the video used creative approaches that made those parts of the explanation stronger.	Many parts of the video took an unorthodox approach to explaining the subject matter, which made the overall explanation stronger.	The entrant implemented a creative approach throughout the entire video that helped the viewer understand the subject matter.	Video provided an inventive approach that should be used to teach this subject matter.
Difficulty	Subject matter is typically covered at the elementary school level.	Subject matter is typically covered at the junior high school level.	Subject matter is typically covered at the senior high school level.	Subject matter is typically covered at the senior high school level but the video expands upon more complex areas of the subject matter.	Subject matter is typically covered at the advanced senior high school level or early college level.	Subject matter is typically covered at the advanced college level or higher.
Total (Maximum of 20 points)						

(Enclosure No. 3 to DepEd Memorandum No. 038, s. 2022)

To authenticate this document, please scan the QR code DEPED-OSEC- 458967

CERTIFICATION

KNOWN ALL MEN BY THESE PRESENTS:

That I/We _____ of _____ writer/s in the _____ hereby certify that our entry is of our own, and is new and original to the best of our knowledge. I/We further certify that we give our permission for DepEd – Bureau of Curriculum Development to share the said Videos as supplemental learning materials to be used in the classrooms.

IN WITNESS WHEREOF, I/We have hereunto set our hands on this _____day of _____, 2022 at _____.

_____ Witness

_____ Witness

SUBSCRIBED AND SWORN TO before me this _____ day of _____ 2021, at _____, Philippines, affiant_____, exhibiting his proof of identity as above stated.

Doc. No.:_____
Page No.:_____
Book No.:_____
Series of 2022

Note: ***Please submit this form together with your entries on or before the Deadline of submission.***

(Enclosure No. 4 to DepEd Memorandum No. 038, s. 2022)

To authenticate this document, please scan the QR code DEPED-OSEC- 458967

***Likha* – A Full Proposal Research Competition**

MECHANICS AND CRITERIA

1. This competition is open to all Grade 9 - 12 students from both Public and Private Schools in the country.

2. The first place winners at the Regional level shall represent the region to the National STF competition as approved by the Screening Committee. Only one (1) entry is allowed per category.

3. The four (4) major categories are Life Science, Physical Science, Robotics and Intelligent Machines, and Mathematics and Computational Sciences.

Category	Life Science	Physical Science	Robotics and Intelligent Machines	Mathematics and Computational Sciences
	Individual	Individual	Individual	Individual
	Team	Team	Team	Team

4. The official entries to the National Level *Likha* Competition should be properly endorsed by the Regional Director through an endorsement letter on or before the deadline of submission at the national level on **July 15, 2022**.

5. Entries must be submitted via email to nstf@deped.gov.ph with a subject format: LIKHA_REGION_CATEGORY (ex. LIKHA _ROVIII_LS-I).

6. The email should include completely filled-out **Project Form** *(Enclosure 5)* and other relevant files in PDF format . Incomplete submission of the required documents may disqualify the regional entries.

7. DepEd-NSTF National Technical Working Committee reserves the right to remove, reject, or disqualify any entry if it infringes, misappropriates, or violates any rights of any third party including, without limitation, patent, copyright, trademark or right of privacy or publicity.

8. The Project Proposal will be **screened** according to the following criteria:

Criteria	**Weight**
Originality and Innovation	25%
Technical/Scientific Merit	25%
Community Connection and Impact	25%
Excellence of method	25%
Total	100%

9. The Project Proposal will be **judged** according to the following criteria:

Criteria	Description	Weight
Originality and Innovation	The project provides novel and innovative solutions to issues in the environment	20%
Technical/Scientific Merit	Sound scientific basis to generate new knowledge or apply existing knowledge in an innovative manner	20%
Community Connection and Impact	Outcomes are expected to address the issue or problem identified.	20%
Excellence of method	Solution and method proposed and cost effective, viable, timely and relevant.	20%
Presentation	Proponent/s provide/s a clear explanation of the facts, theories, thorough understanding of the expected output of the proposal.	20%
Total		100%

10. Project Format Descriptions:

a. **Executive Summary**- a brief discussion about the proposal.
b. **Introduction**- a declaration of the project and its idea and context to explain the goals and objectives to be reached and other relevant information that explains the need for the project and states the aims to describe the amount of work planned for implementation; refers to a simple explanation or depiction of the project that can be used as communication material.
   - **Rationale**- a brief analysis of the problems identified related to the project
   - **Significance**- refers to the alignment to national S&T priorities, strategic relevance to national development and addresses current issues and concerns.
   - **Scientific Basis**- scientific findings, conclusions or assumptions used as justification for the research.
   - **Theoretical Framework**- the structure that summarizes concepts and theories that serve as basis for the data analysis and interpretation of the research data.
   - **Objectives**- statements of the general and specific purposes to address the problem areas of the project.

c. **Review of Literature** - refers to the following: (a) related researches that have been conducted, state-of-the-art or current technologies from which the project will take off; (b) scientific/technical merit; (c) results of related research conducted by the same Project Leader, if any; (d) Prior Art Search, and; (e) other relevant materials.

d. **Methodology** - description of the design and engineering solution proposed to address the problem, the (a) variables or parameters to be measured and evaluated or analyzed; (b) treatments to be used and their layout; (c) experimental procedures and design; (d) statistical analysis; (e) evaluation method and observations to be made, strategies for implementation (Conceptual/Analytical framework).

e. **Expected Output and Potential Impact** – discusses the possible outcome of the project, the target beneficiaries, socio and economic impact

f. **Workplan and Target Deliverables**- indicates the timeline of activities to be accomplished in the conduct of the project.

g. **References** – list of reference materials such as journals, designs and patents, and online sources. It should follow Chicago Manual of Style in referencing.

(Enclosure No. 5 to DepEd Memorandum No. 038, s. 2022)

LIKHA - RUBRIC EVALUATION TOOL (SCREENING)

CRITERIA	POINT
1. Originality and Innovation (25) 1. Does the project show originality and innovation in terms of: a. proposed approach in solving the problem? b. research design? c. research methodology? d. construction or design of a new or improved equipment? 2. Did the research project considered an issue/problem/gap that previous research projects did not addressed? 3. Does the project transforms an idea or solution into a creative, unique and major improvement in the current technology/process/product/technique/design?	
2. a. Technical/Scientific Merit (25) (If an engineering project, please see 2b. Engineering Goals.) 1. Is the problem stated explicitly and concisely? 2. Was the approach to solve the problem supported by relevant, critical and logical related literatures (scientific basis/theoretical framework/mathematical theory)? 3. Did the finalist/team cite sufficient number of credible related literatures to provide a solid understanding and pre-requisite information for readers to better understand the research project? 4. Does the finalist/team recognize the projects' limitations? 5. Does the analysis of backgound information with depth? b. Engineering Goals 1. Does the project have a clear objective? 2. Is the objective relevant to the potential user's needs? 3. Is the solution: workable? Acceptable to the potential user? Economically feasible? 4. Could the solution be utilized successfully in design or construction of an end product? 5. Is the solution a significant improvement over previous alternatives or application? 6. Will the solution be tested for performances under standardized protocols?	
3. Community Connection and Impact (25) 1. Did the project addressed a relevant research issue? (e. g. food safety, water conservation, cyber security, traffic/road congestion, health, disaster mitigation, agriculture and environment and others) 2. Did the student clearly defined the extent on how the research project can potentially benefit and meet the needs of the society? 3. Does the proposed solution gives value, effectiveness and efficiency to their target sector?	
4. Excellence of Method (25) 1. Was the research methods supported by relevant and credible related literatures? 2. Was there an efficient, thorough, valid and reliable procedural plan to attain the research objectives? 3. Are the variables clearly identified and defined? 4. If controls were necessary, did the student recognize their need and will be used correctly? For the extraneous variables, did the student identified methods on how to control such variables? 5. Does the critical elements (e. g. treatments, techniques, protocols, replications, trials) of the research design and methods appropriately developed? 6. Does the project specifically and clearly explained what and how quantitave and qualitative data will be collected? 7. Does the project recognize ethical or safety issues and has adequate plans to manage risks? 8. Does the project include appropriate protocols/procedures for waste disposal and data analysis? 9. Is the proposed timeline/workplan appropriate, achievable, practical and feasible?	
TOTAL	
Signature over printed name of the evaluator	

(Enclosure No. 6 to DepEd Memorandum No. 038, s. 2022)

LIKHA - RUBRIC EVALUATION TOOL (FINAL JUDGING)

CRITERIA	POINT
1 Originality and Innovation (20) 1. Does the project show originality and innovation in terms of: a. proposed approach in solving the problem? b. research design? c. research methodology? d. construction or design of a new or improved equipment? 2. Did the research project considered an issue/problem/gap that previous research projects did not addressed? 3. Does the project transforms an idea or solution into a creative, unique and major improvement in the current technology/process/product/technique/design?	
2 a. Technical/Scientific Merit (20) (If an engineering project, please see 2b Engineering Goals.) 1. Is the problem stated explicitly and concisely? 2. Was the approach to solve the problem supported by relevant, critical and logical related literatures (scientific basis/theoretical framework/mathematical theory)? 3. Did the finalist/team cite sufficient number of credible related literatures to provide a solid understanding and pre-requisite information for readers to better understand the research project? 4. Does the finalist/team recognize the projects' limitations? 5. Does the analysis of backgound information with depth? b. Engineering Goals 1. Does the project have a clear objective? 2. Is the objective relevant to the potential user's needs? 3. Is the solution, workable? Acceptable to the potential user? Economically feasible? 4. Could the solution be utilized successfully in design or construction of an end product? 5. Is the solution a significant improvement over previous alternatives or application? 6. Will the solution be tested for performances under standardized protocols?	
3. Community Connection and Impact (20) 1. Did the project addressed a relevant research issue? (e. g. food safety, water conservation, cyber security, traffic/road congestion, health, disaster mitigation, agriculture and environment and others) 2. Did the student clearly defined the extent on how the research project can potentially benefit and meet the needs of the society? 3. Does the proposed solution gives value, effectiveness and efficiency to their target sector?	
4. Excellence of Method (20) 1. Was the research methods supported by relevant and credible related literatures? 2. Was there an efficient, thorough, valid and reliable procedural plan to attain the research objectives? 3. Are the variables clearly identified and defined? 4. If controls were necessary, did the student recognize their need and will be used correctly? For the extraneous variables, did the student identified methods on how to monitor and keep these variables constant? 5. Does the critical elements (e. g. treatments, techniques, protocols, replications, trials) of the research design and methods appropriately developed? 6. Does the project specifically and clearly explained what and how quantitave and qualitative data will be collected? 7. Does the project recognize ethical or safety issues and has adequate plans to manage risks? 8. Does the project include appropriate protocols/procedures for waste disposal and data analysis? 9. Is the proposed timeline/workplan appropriate, achievable, practical and feasible?	
5. Presentation (20) 1. How clearly and concisely does the finalist or team discussed his/her project and explain the rationale and procedures? Watch out of memorized speeches that reflect little understanding of principles. 2. Does the written material reflect the finalist's or team's understanding of the research proposal? 3. Are the important phases of the project presented in an orderly manner? 4. How clearly is the rationale presented? 5. How clearly are the research methods presented? 6. Did the student used presentation resources as guide? 7. Is the presentation professional with the use of colors, fonts and graphics? 8. Did the student speaks clearly, maintains eye contact and uses appropriate scientific language? 9. Did the student provided clear, detailed and accurate answers to the questions given?	
TOTAL	
Signature over printed name of the Judge	

(Enclosure No. 7 to DepEd Memorandum No. 038, s. 2022)

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LIKHA – PROJECT PROPOSAL TEMPLATE

(1) PROJECT PROFILE

Project Title: _____

Names of Project Proponent/s: _____

Region: _____ Division _____

School: _____ Grade Level: _____

Project Duration (number of months): _____

Email: _____ Contact number: _____

(2) CATEGORY OF RESEARCH

_____ Physical Science
_____ Life Science
_____ Robotics and Intelligent Machines
_____ Mathematics and Computational Sciences

(3)

____ Individual
____ Team

(4) THEME

_____ Food Safety
_____ Water Conservation
_____ Renewable Energy
_____ Cyber Security
_____ Traffic / Road Congestion
_____ Health
_____ Disaster Mitigation
_____ Agriculture and Environment.
_____ Others (please specify)
_____

(5) EXECUTIVE SUMMARY (not to exceed 200 words)

(6) INTRODUCTION

(6.1) RATIONALE/SIGNIFICANCE (not to exceed 300 words)

(6.2) SCIENTIFIC BASIS/THEORETICAL FRAMEWORK/MATHEMATICAL THEORY INVOLVED

(6.3) OBJECTIVES

General:
Specific:

(7) REVIEW OF LITERATURE

(8) METHODOLOGY

(9) EXPECTED OUTPUTS AND POTENTIAL IMPACTS

(10) WORK PLAN AND TARGET DELIVERABLES

(11) REFERENCES

(Enclosure No. 8 to DepEd Memorandum No. 038, s. 2022)

#STEM*TOK*PERIMENTS - A TIKTOK SCIENCE EXPERIMENT COMPETITION MECHANICS

1. This competition is open to all Junior and Senior School students from both Public and Private Schools in the country.

2. There will be two(2) categories: (a) Junior High School, and (b) Senior High School. The video entry should feature only one (1) Tiktok user.

3. Each region may send one **(1) official entry from each category** to the National *STEMTok*periments Competition. They should be properly endorsed by the Regional Director through an endorsement letter on or before the deadline of submission at the national level on July 15, 2022.

4. The participant must design an experiment proving or applying a Scientific concept, theory or law in a cheerful, lively and creative manner through a Tiktok video that is not more than one (1) minute.

5. The participant can explain the topic/concept in English or Filipino.

6. The Tiktok Video must use the hashtags #SCITOKPERIMENTS and #NSTF2022 in uploading the video entry in Tiktok.

7. All contents and audio in the TikTok video must be original and are owned by the participant/s. All creative visual tools such as animations, simulations, physical demonstrations, or visual aids are allowed. The contestant will be held accountable to any issues that may arise with regard to the originality and accuracy of the content.

8. The following TikTok video format are highly recommended:

File size: The video should be up to 287.6 MB in size for iOS, or 72 MB on Android.

Orientation: TikTok is formatted to be viewed on a smartphone, so vertical video is best.

Dimensions: TikTok video dimensions should be 1080×1920.

Aspect ratio: The aspect ratio should be that of a standard smartphone screen, 9:16. 1:1 is also possible, but it will not take up the whole screen.

File type: TikTok supports .mp4 and .mov files.

9. Entries must be submitted via email at nstf@deped.gov.ph with a subject format: "#SCITOKPERIMENTS_REGION_ENTRYNO._" (ex. "#SCITOKPERIMENTS _ROVIII_EntryNo1).

10. The email should include: (1) the name/s of the participant/s; (2) Tiktok video link attachment of the video entry; and (3) a pdf file of the video script along with the references in Chicago Manual of Style. Non-submission of any of the required documents for the competition category will automatically be disqualified.

11. DepEd-NSTF National Technical Working Committee reserves the right to remove, reject, or disqualify any entry if it: (a) violates the terms of service and privacy policy of Tiktok: and (b) infringes, misappropriates, or violates any rights of any third party including, without limitation, patent, copyright, trademark or right of privacy or publicity.

12. Entries submitted to "#SCITOKPERIMENTS do not represent DepEd and the NSTF Technical Working Group.

13. The Tiktok Video will be judged according to the following criteria:

Criteria	**Percentage**
Originality and Creativity • Video is original, creative and unique.	30%
Delivery/Execution • Delivery is well planned with smooth transitions and edits. • Ideas are very organized and easily understood. • All sound and visual elements coincide with the video's content.	30%
Accuracy of Content • All information being delivered is accurate and relevant.	40%
Total	100%

(Enclosure No.9 to DepEd Memorandum No. 038, s. 2022)

NATIONAL SCIENCE AND TECHNOLOGY FAIR TIMELINE

Activity	Date/Schedule
School and Division Level Screening	May 30 – June 3, 2022
Regional Level Science and Technology Fair	June 27 – July 1, 2022
Submission of Entries for the National Level Science and Technology Fair	July 15, 2022
National Level - Preliminary Screening of Entries	July 18 - 22, 2022
National Science and Technology Fair Culmination Program and Awarding Ceremony	August 1 – 5, 2022