



Republic of the Philippines
Department of Education
Region XI
SCHOOLS DIVISION OF DIGOS CITY
Digos City



September 11, 2019

Division Memorandum
No. 751 s. 2019

2019 Division Sci-Tech Expo and Science and Technology Fair

**To: Public Schools District Supervisors
School Principals/Administrators/Officers-in-Charge
(Public and Private Elementary, Junior and Senior High Schools)**

1. In reference to Division Memorandum No. 740, s. 2019, entitled "Conduct of 2019 Division Festival of Talents," the 2019 Division Sci-Tech Expo and 2019 Division Science and Technology Fair (DSTF) will be held on September 23-24, 2019 at Ramon Magsaysay Central Elementary School, Digos City.
2. The 2019 Division Sci-Tech Expo and Science and Technology Fair have the following objectives:
 - a. Provide the learners and teachers with opportunities to showcase their talents through exhibition of their products and performances as evidence of learning;
 - b. Promote holistic development, camaraderie and sportsmanship through healthy competitions;
 - c. Promote Science and Technology consciousness, and a culture of innovation among the youth; and
 - d. Identify contestants who shall represent the Division to the Regional and other levels of competitions.
3. The events to be contested and the number of contestants per event are as follows:

Events	Number of Participants
On-the-S.P.O.T. Competition (Scientific Pioneers and Outstanding Thinkers) for JHS and SHS	Top two (2) winners (team of two members) for each secondary school
Science Investigatory Project (SIP) for Elementary	Top two (2) winners for the team and individual categories from each District (Mt. Apo, Digos Oriental, Digos Occidental, Digos South, and Private Schools)
Strategic Intervention Material (SIM) for Teachers	One entry per grade level from each District (Mt. Apo, Digos Oriental, Digos Occidental, Digos South, DINCHS, and Private Schools)
Performance Output Display	Two Displays/Exhibits per District: one for Elementary and one for JHS/SHS (Mt. Apo, Digos Oriental, Digos Occidental, Digos South, DINCHS (one only), and Private Schools)
Science and Technology Fair (SIP Secondary)	Top two (2) winners in each category from each secondary school (Life Science, Physical Science and Robotics and Intelligent Machines Categories both Individual and Team subcategories)
Innovation Expo	Top two (2) winners from each secondary school (may be individual or team with 2 members)

4. The participants to this activity are the contestants, coaches, District Science Coordinators, School Research Coordinators, event facilitators, judges and members of the working committee.
5. Entries for the 2019 Science and Technology Fair must adhere to the Guidelines on National Science and Technology Fair for School Year 2019-2020 as stipulated in DepEd Memorandum No. 113, s. 2019, and the Intel International Science and Engineering Fair Rules and Guidelines.
6. Research papers must be submitted to the registration committee in 3 copies (in print) not later than 9:00 AM of September 23, 2019. A soft copy of the research paper may also be submitted thru the email address: luzmindaj@yahoo.com. The display board shall be set up on September 23, 2019 and open for the gallery walk on the same day at a designated area in Ramon Magsaysay Central Elementary School.
7. No registration fee shall be collected from the participants. The participants shall take charge of their meals and snacks. Travel and other incidental expenses of the participants shall be charged to local funds/MOOE and other funds subject to the usual accounting and auditing rules and regulations.
8. School heads are requested to make necessary arrangements such that classes of teacher-participants are taken care of.
9. Attached are the List of Working Committees, Event Facilitators and Judges, Guidelines for the Science Competitions and Matrix of Activities.
10. For information, guidance and compliance.


 WINNIE E. BATON, Ed. D
 Assistant Schools Division Superintendent
 Officer-in-Charge
 Office of the Schools Division Superintendent

Encls: As stated
 Reference: Division Memorandum No. 740, s. 2019
 To be indicated in the Perpetual Index under the following subjects:
 CURRICULUM SCIENCE COMPETITION
 lbj: 2019 division sci-tech expo and science and technology fair
 11 September, 2019

DepEd Schools Division of Digos City
 RECORDS SECTION
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Working Committees, Event Facilitators and Judges for the
2019 Sci-Tech Expo and 2019 Division Science and Technology Fair
September 23-24, 2019
Ramon Magsaysay Central Elementary School

Committees, Event Facilitators and Judges

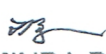
A. Working Committees

Committees	Chairperson	Members
Hall/Contest Venues/Tarp Preparation and Decoration/ SIP and Performance Output Exhibits Area/Light & Sound and Multimedia Facilities	Relydia Banlasan	Lito Cagas Jessie Balorio Rex Calamohoy
Certificates Preparation and Documentation	Warren Palmero	Beth Dedace
Registration and Awards	Precious Joy Villacastin	Aida Duropan, Merla Gillado
Food and Token Preparation	Mary Jane Bongcayao	Ma. Gilda Lustre

B. SIM and SIP Competitions Facilitators and Judges

Events	Facilitators	Judges
SIM	Ruby Paderanga	Mishel Cadungog, Mary Joy Fortun Ronald Dedace
SIP (Elementary)	Shiela Joy Fondevilla	Maricel Manceras, Marilou Diana, Janely Pantinople
On-the S.P.O.T. competition	Boots Liwayway Relampago	Eleser Mateo, Xavier Fuentes, Irene Dandoy
Performance Output Exhibit	Lito Cagas	Mylene Robiños, Eppie Grace Presto Juvy Comaingking
SIP (DSTF – Day 2)	Rex Calamohoy Jessie Balorio Beth Dedace	Garnette Mae Balacy, Athena Bien, Xavier Fuentes

Steering Committee:


Chairperson: LUZMINDA B. JASMIN
EPS-Science

2019 Division Sci-Tech Expo and Science and Technology Fair
September 23-24, 2019
MATRIX OF ACTIVITIES

September 23, 2019					
Time	SIM	SIP (Elementary)	On-the-S.P.O.T. Competition	Performance Output Exhibits	DSTF
7:00-8:00	Registration	Registration	Registration	Registration	Registration
8:00-9:00	Opening Program	Opening Program	Opening Program	Opening Program	Opening Program
9:00-9:15	Orientation	Orientation	Orientation	Orientation	Orientation
9:15-10:45	Judging	Setting Up of Display Board	Writing Process (Part I)	Setting Up of Display	Setting Up of Display Board
10:45-12:00		Pre-Judging	Oral Presentation		
12:00-1:00	Lunch Break	Lunch Break	Writing Process (Part II)	Lunch Break	Lunch Break
1:00-3:00	Judging	Oral Defense		Oral Defense	Judging
3:00-4:00					
4:00-5:00	Declaration of Winners	Declaration of Winners	Declaration of Winners	Declaration of Winners	
September 24, 2019					
8:00-4:00					Oral Defense
4:00-5:00					Declaration of Winners

Prepared by:


LUZMINDA B. JASMIN
Education Program Supervisor

2019 DIVISION FESTIVAL OF TALENTS
Guidelines for the Science Competitions

A. Registration:

1. To facilitate the registration process, each District/School shall prepare and submit the accomplished registration form to the registration committee during registration time using the following template:

School:			
Event:		Level:	
Name of Contestant	Signature	Coach	Signature

This shall be accomplished in two copies for each event.

B. On-the-SPOT Competition

The contest shall be in two parts: the One-Minute Presentation and the Full Development of Proposal.

Part I – One-Minute Presentation

1. The first part of the contest is the One-Minute Presentation of the project proposal where the teams shall develop and present their proposal to the panel of judges of their solution about a real-world problem/scenario of local or global importance.
2. The situation containing the problem shall be given on-site on the day of competition. Other pertinent data shall also be presented as part of the scenario. The contestants are given 1 ½ hours to conceptualize and prepare their slides for presentation. The contestants may use the internet and other printed resources in developing their presentation, however, the teams are not allowed to confer with their coach while the contest is on – going. Any form of communication between the contestants and other parties (coach, parents, classmates, teachers, etc.) shall warrant automatic disqualification.
3. The presentations may consist of the following:
- a. What challenge is your proposed solution/innovation designed to solve?
 - b. Detail key features of your proposed solution/innovation
 - c. How is your innovation or your proposed solution similar or different from existing activities, technologies and solutions and how it would build up to the existing technology/solutions.
4. During the presentation, one team shall be given one minute to present. The time shall start as the contestants start to speak. After the presentation, the judges may ask questions to clarify details on their proposal.
5. Draw lots shall be done to determine the order of presentation. While one team is presenting, all the other teams shall be at the holding room.
6. A signal that the time for presentation is up and the contestants shall immediately stop presenting.
7. The top five (5) teams shall move to the final round. The finalists shall not be allowed to leave the contest venue during the break. They are advised to take with them their provisions and shall take their meals and snacks in the contest venue.

Part II – Developing the Full Proposal

9. The full proposal is a detailed written description of your proposed solution/ innovation. Just like in the first part, the teams are allowed to use internet and other print resources. They shall develop and print their proposals within 3 hours. The scores in the preliminary round shall have no bearing in the final round.
10. The Full Proposal shall have the following components:
- a. Title
 - b. Summary (200 – 300 Words)
 - c. Background and Problem
 - Describe the challenges and how the proposed solution addresses the problem presented.
 - Scientific Principles and Technology applicable to the resolution of the problem.
 - Beneficiaries

d. Proposed Solution to the Problem Presented

- Methods/Details of the proposed solution including the Cost -Analysis
- Include illustrations, figures and charts.

e. References

- May use any format as long as consistency is observed.

11. The teams shall encode their proposals in word processing software, double spaced using Bookman Old style font size twelve set in A4 size paper. Margins shall be 1 inch in all sides of the paper. Within the 3 hours, the teams shall submit their printed proposals (three copies) to the panel of judges.

12. The proposals shall be subjected to a plagiarism check. Any proposals which exceeds 15% similarity index (uncited) shall be deducted 2 points from the total score for every percent in excess. However, cited references shall be excluded from the 15% tolerance.

13. There shall be oral presentations limited to 3 minutes for each team. Questions may be asked by the judges after each presentation. The order of presentation shall follow the order in the first part.

The following are the criteria for judging.

Criteria (Part I)	Percentage
Discussion/Arguments (based on scientific, technological and other valid assumptions)	30 %
Relevance of data used	20 %
Feasibility of the proposed solution	20 %
Clarity of presentation (ability to effectively communicate solutions)	20 %
Evidence of effective collaboration	10%
TOTAL	100 %
Criteria (Part II)	
Organization/Discussion/Arguments (based on scientific, technological and other valid assumptions)	30 %
Relevance of data used	20 %
Feasibility of the proposed solution	20 %
Clarity of Presentation	
• Written	15 %
• Oral	10 %
Evidence of effective collaboration	5 %
TOTAL	100%

Participants shall bring their own laptops, extension wires, pocket wifi, printer, paper and other materials that they may need. It is also advised that they have to check compatibility of their laptop with the LCD projector before the start of the presentation.

The top three (3) winners shall be declared.

C. Strategic Intervention Material (SIM) for teachers

All Strategic Intervention Materials shall include the following: Title Card, Guide Card, Activity Card, Assessment Card, Enrichment Card, Reference Card and Answer Card. The criteria for judging will be as follows:

Criteria	Points
1. Sub-tasking	15
2. Congruence	15
3. Usability/Functionality	45
4. Replicability	25
Total	100

The manuscript shall use A4 paper size and shall attach the action research and assessment result showing the least learned competency data. This shall be submitted upon registration.

D. Science Investigatory Project (SIP) for Elementary

The Science Investigatory Projects shall be of two categories: Individual and Team (with maximum of 3 members) regardless of the theme of the project (Physical or Life Science). The project shall be evaluated using the following criteria:

Criteria	Points
1. Creative Ability	30
2. Scientific Thought	30
3. Thoroughness	15
4. Skill	15
5. Clarity	10
Total	100

Three (3) copies of the manuscript shall be submitted on or before 9:00 AM of September 23, 2019 to the registration committee. Each entry shall also set up their Display Board as exhibit on the same day of the contest as exhibit using the National Science and Technology Fair Guidelines as per DepEd Memorandum No. 113 s. 2019. Prejudging shall be done in the morning at the display area while the oral defence shall be conducted at 1:00 in the afternoon

E. Division Science and Technology Fair (DSTF)

The Division Science and Technology Fair shall be conducted following the guidelines of the National Science and Technology Fair 2019-2020 as stipulated in DepEd Memorandum No. 113, s. 2019 and the Intel International Science and Engineering Fair Guidelines.

There shall be three (3) categories: Life Science (LS), Physical Science (PS) and Robotics and Intelligent Machines (RIM) with subcategories - individual and team.

The project shall be evaluated using the following criteria:

Criteria	Points
1. Creative Ability	30
2. Scientific Thought	30
3. Thoroughness	15
4. Skill	15
5. Clarity	10
Total	100

Top three winners will be declared in each category.

In addition, a fourth category, the Innovation Expo will also be contested. This is a Science & Technology Exposition designed to showcase products and innovation of learners. Contestants to his competition are Junior and Senior High School Students (ages 13-16) from both Public and Private Schools. The manuscript shall use A4 paper with the following format:

1. Title Page & Table of Contents

- Title page shall contain the project title, name/s of proponent/s and the name of the school

2. Introduction:

- Features and Specifications – This describes the details of your invention.
- Market Trends and Opportunities
 - what inspired you to develop this invention
 - an explanation of what problem your invention will solve
 - details how you determined that the invention that you created did not already exist.
 - explain what products are already on the market that are somewhat like your invention and describe how yours differs.

3. Materials and Methods:

- Details on how you made your innovation.
- Instructions/guide on how to use the innovation.
- Detailed drawing(s) of your innovation.

4. Results and Discussion:

This is the essence of your paper. Compare your results with theoretical values, published data, literature and related studies, commonly held beliefs, and/or expected results. Include a discussion of possible errors, statistics, graphs, pages with your raw collected data, etc.

- How did the data vary between repeated observations of similar events?
- How were your results affected by uncontrolled events?
- What would you do differently if you repeated this project?
- What other experiments should be conducted?

5. Conclusions: This discusses the potential applications, possible customer benefits, and the impact of the problem in solving problems and issues of today and tomorrow.

6. Acknowledgements: Individuals, businesses and educational or research institutions

7. References/Bibliography:

Chicago Manual of Style

<http://www.chicagomanualofstyle.org/home.html>

The display board shall have the dimension of 38" x 48" (portrait) made of illustration board with the following format:

Format of Display Board:

Title	Title should be short but would capture the essence of the product/invention
Picture	Picture of the product/invention only
Overview	What problem is solved by the invention? What are the existing solutions and what limitations do these solutions have?
Key Features	What are the novelty features of this invention?
Benefits and Impact	What are the benefits/impact of this invention to society?
Developers' Name/s	Who is/are the inventor/s?

48 inches

The following are the criteria for judging:

Criteria	Points
1. Originality and Innovation	30
2. Community Connection & Impact	25
3. Functionality and Quality	25
4. Utilization of Patent Information	20

Contestants to the Division Science and Technology Fair shall submit three (3) copies of the manuscript of the research with attached copy of the Project Evaluation Form on or before 9:00 AM of September 23, 2019 to the registration committee. The display board shall also be set up as exhibits in the morning of September 23, 2019, while the oral defense shall be done on September 24, 2019. Proponents should be at the defense room at 7:30 in the morning.

The top three (3) projects will be declared winner.

F. Performance Output Display:

A display of the performance output of learners shall be made by district/School Cluster for the elementary and secondary level. Performance outputs of learners in Science may include projects/products, multimedia presentations, research projects, written reports, models, etc. which are prepared in line with the performance standards provided in the K to 12 Curriculum.

Setting up of the exhibit shall be done in the morning of September 23, 2019 and the judging shall be done in the afternoon.

The following shall be the criteria for judging the Display:

Criteria	Points
1. Creativity, originality	20
2. Alignment with Curriculum standards	20
3. Demonstration and integration of knowledge, understanding and 21 st century skills in various context	30
4. Quality and variety of collection	15
5. Presentation	15
Total	100

Top three display for the elementary and secondary level shall be given certificate of recognition.

Prepared by:


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