



DepEd
CARAGA

Sumbanan

The Regional Contextualized Manual
for the Implementation of Special
Curricular Programs in Science

- ▶ Special Science Elementary Schools
- ▶ Regional Science High School
- ▶ Legislated Science High Schools
- ▶ Science, Technology and Engineering Implementers

Curriculum and Learning
Management Division

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PREFACE

Most of the Science and Technology-related guidelines were crafted during the implementation of the Revised Basic Education Curriculum (RBEC). The remarkable curricular reform from RBEC into the Enhanced Basic Education Curriculum or K to 12, made some of the provisions in the S&T-related guidelines inconsistent and inapplicable vis-a-vis policies and guidelines for Kto12 Basic Education.

While the curricular reforms for S&T-oriented schools are ironed in the Department of Education (DepEd)-Central Office (CO), DepEd-CO directed all implementers to observe status quo in the operation of the Special Curricular Programs (SCP) in Science. As a result, Schools Division Offices (SDOs), having no definite and guiding reference, implemented the SCP-Science in varying directions. Concerns regarding the student mobility, subject offerings, assessment, applications and admissions are usually raised from the school level to the SDOs and Regional Office (RO) since schools are greatly challenged in implementing immediate actions to resolve their concerns.

With these, the Curriculum and Learning Management Division (CLMD) together with the Curriculum Implementation Division (CID) of the different Schools Division Offices (SDO) have identified applicable guidelines from the S&T-related policies, streamlined them against the recent issuances, compiled the coherent Regional Memoranda, and conducted series of consultative meetings with School Heads and teachers from the SCP-Science implementers.

Since modification of the policies is a violation to the policy itself, the contextualization of few areas in this manual is limited only to parts where schools and SDOs are required to implement them, but are given freedom on “how” they will implement them. Contextualization is also evident in various monitoring and evaluation tools found in this manual. The RO added other parameters for M&E aside from the minimum requirements promulgated by the national issuances.

Generally, this manual aims to provide guidance to all Special Science Elementary Schools, Regional Science High School (RSHS), Legislated Science High Schools (LSHS), Science, Technology and Engineering (STE) Program implementers in areas of governance and curriculum.


KEVIN HOPE Z. SALVAÑA
Regional Science Coordinator
DepEd-Caraga Regional Office

Co-authors

Jane Basul, PhD • Abraham L. Masendo, PhD • Juvy B. Luna • Nonita C. Patalinghug, PhD • Jean Ramirez
Jonivil L. Vidal, PhD • Rene G. Ebol, PhD • Relyn D. Raza, PhD • Marilytte Ensomo, PhD
Gersim Lumintac, PhD • Edna Trinidad, PhD • Arlene L. Abala

Contributors

All Science Department Heads and School Heads of SCP-Science implementers

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Policies and Guidelines on S&T-oriented Curriculum in Basic Education

DO 69, s. 1993 - Science High Schools

Science high schools have enriched Science, Mathematics, and English Curriculum. Newly hired teachers should be superior graduates of teacher education institutions, or should have scored well in the test given by the Professional Board of Examiners for Teaching. In any case, teachers with appropriate master's degree will be preferred. Science high schools should not have more than 40 students in any class.

DO 44, s. 1995 - Establishing Provincial Science High Schools

A policy encouraging the establishment of Science High Schools, initially among public high schools on a regional basis, expanded to refer to the establishment on a provincial basis. It is desired that science high schools shall be established in all provinces over a five year period beginning school year 1995-1996. The guidelines on the nature of science high schools, curriculum, student admission and retention, teacher hiring procedures, class size, facilities and appointment of school head/administrator promulgated in DECS Order No. 69, s. 1993

DO 49, s. 2003 - The 2003 Curriculum of the Regional Science High Schools

This Memorandum indicates the time allotment and the unit credits of the subjects comprising the curriculum for RSHS. Course decryption for additional subjects like Earth and Environmental Science, Research I (Technical Writing and Basic Statistics), and Computer Education I.

DO 41, s. 2005 - Implementing Guidelines in the Admission, Retention, Grading System and Selection of Honor Students in the Regional Science High Schools

Only students who have maintained the grade requirement set for the RSHS shall be allowed to transfer laterally, that is, from one RSHS to another. Transfer from a general high school to the RSHS shall not be allowed in any curriculum level.

DO 41, s. 2004 - Revised Curriculum of the 110 S&T Oriented (ESEP) High Schools

This issuance contains the time allotment and the unit credits of the subjects comprising the revised ESEP curriculum. The Course Description is provided and the program is implemented in at least 2 classes per year level, each with utmost 40 students per class. Admission shall be opened to First Year High School students with honors and upper 20 percentile rank of qualifiers of the High School Readiness Test (HSRT).

DO No. 55, s. 2010 - Policy Guidelines on Strengthening Science and Mathematics Education at the Secondary Level

Type A are the 197 schools offering Special Science Classes which were formerly referred to as the Engineering and Science Education Program (ESEP) of the S&T Oriented High Schools. Type B are the additional 600

selected regular secondary schools that will establish one Special Science Class in each curriculum level. Course Description for all elective subjects are enclosed in the issuance.

DO No. 104, s. 2010 - Revised List of Science and Technology (S&T)-Oriented High Schools Implementing the Engineering and Science Education Program (ESEP)

S&T-oriented high schools in Caraga are Surigao del Norte NHS, Agusan del Sur NHS, Agusan NHS, J. Elpa NCHS, (newly-identified) Magallanes NHS, Bislig City NHS, Don Ruben E. Ecleo NHS, Siargao NHS. School Heads of these implementers are required by the DO to submit annual Progress Report.

DO No. 57, s. 2011 - Policy Guidelines in the Implementation of the Special Science Elementary Schools (SSES) Project

The Bureau of Elementary Education (BEE) implemented SSES Project in 2007 to 57 public elementary schools. This project has expanded to 43 more schools in 2009. This is a research and development project of the BEE that aims to: (1) provide learning environment to the gifted and talented through special Mathematics and Science curricula; (2) provide the gifted and the talented learners with avenues, opportunities and exposures for developing necessary skills and aptitudes; (3) capacitate school heads and teachers in implementing and managing SSES; and (4) develop SSES program for both the regular schools and SPED centers. For SY 2011-2012, the Project is expanded to 100 more public schools which consist of SPED centers. Each school is provided with subsidy to fund the program. Caraga SSES implementers, as appended in this issuance, are: (Batch 1) Agusan del Sur Pilot Elementary School, Surigao City Special Science Elementary School, and Cabadbaran North Elementary School; (Batch 2) Bislig Central; Tandag Special Science Elementary School; Mainit Central; (Batch 3) General Luna CES; Aurelio ES; Nasipit CES; and Ampayon CES. SPED Centers with SSES: (Batch 1) Butuan City Central School SPED Center; (Batch 3) Cabadbaran South CS SPED Center; Trento SPED Center; and Dapa Central School SPED Center.

DO No. 38, s. 2013 - Guidelines on the Utilization of Support Fund for Schools Implementing the Science, Technology and Engineering (STE) Program

The Bureau of Secondary Education (BSE) implemented the STE to 112 schools in 2004. This program formerly known as ESEP, is initially piloted by Science Education Institute (SEI) of the Department of Science and Technology (DOST) in 1994. The program has expanded to additional 86 schools offering two classes per year level in selected general high schools with large enrollment. Each implementing school is given Php 144,000.00 fixed allocation to fund the program. STE Schools in Caraga are: Surigao del Norte NHS; Agusan del Sur NHS; Agusan NHS; J. Elpa Nat'l Comprehensive HS; Magallanes NHS; Bislig City NHS; Don Ruben E. Ecleo NHS; and Siargao NHS.

DO No. 13, s. 2016 - Implementing Guidelines on the Direct Release and Use of Maintenance and Other Operating Expenses (MOOE) Allocations of Schools, Including Other Funds Managed by School

Budgets for special curricular programs will no longer be downloaded from the Central Office (CO) and are now part of the regular school MOOE.

RM No. 286, s. 2016 - Data Requirement for DepEd Public Schools Implementing Special Curricular Program

Quality Assurance Division (QAD) conducts Monitoring and Evaluation (M&E) for schools implementing special curricular programs (SCP). Public schools implementing SCP for three years shall submit documentary requirements to SDO for evaluation. The evaluated documents shall be submitted to Regional Office (RO) for evaluation and ocular inspection using a checklist. Upon compliance, the QAD shall then recommend to the Regional Director (RD) for the approval and issuance of government recognition to public schools implementing SCP.

RM No. 303, s. 2016 - Addendum and Corrigendum to RM No. 286, s. 2016 Re: Data Requirement for DepEd Public Schools Implementing Special Curricular Program

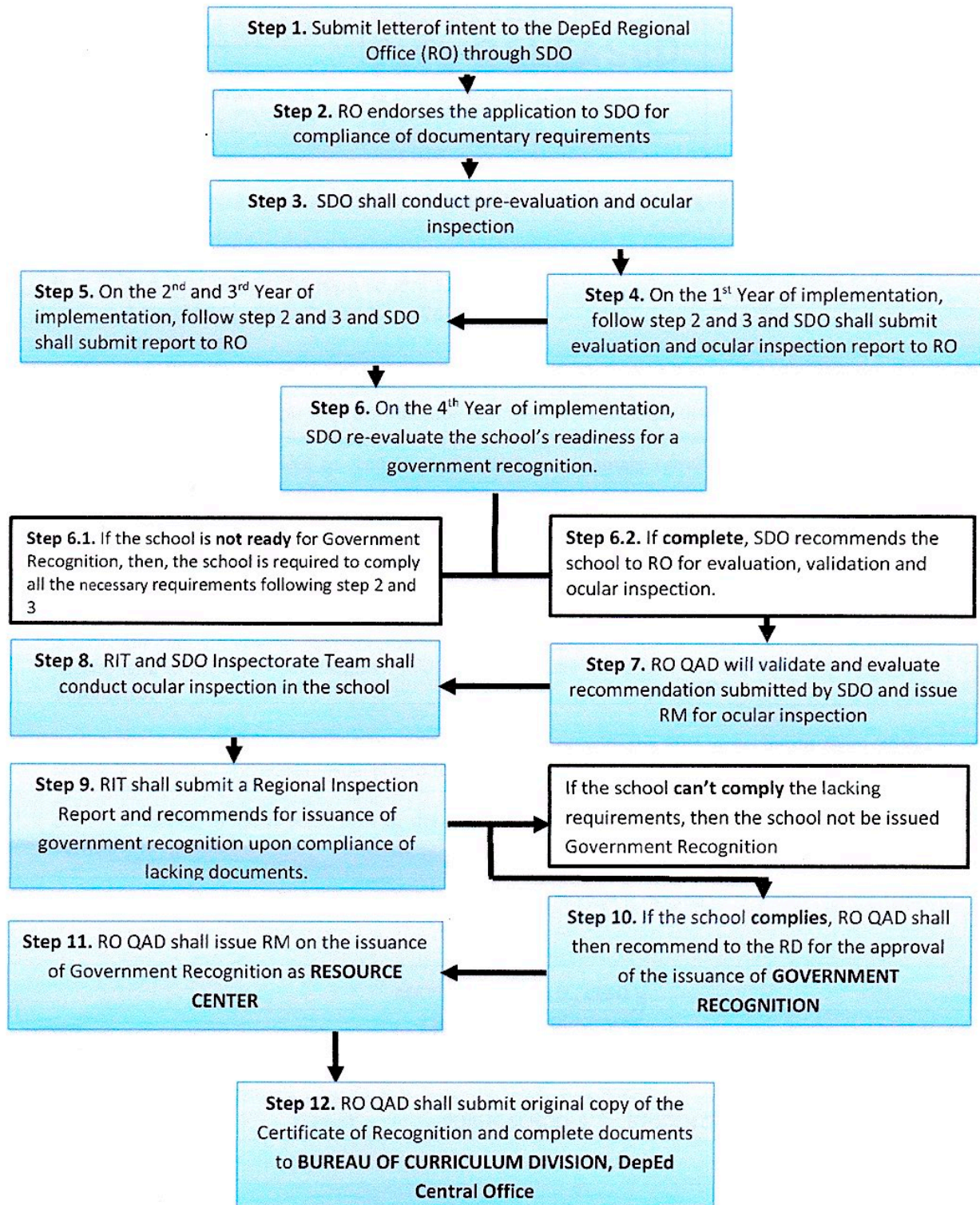
DepEd public schools with the intention to implement SCP shall submit a letter of intent to the RO through the SDO. The RO shall then require the school to comply and submit documentary requirements to SDO pre-evaluation and ocular inspection. SDO shall submit evaluation and ocular inspection report to RO in the 1st year of implementation and on the 2nd and 3rd year the SDO shall monitor and evaluate the school and furnish RO QAD copy of the report. On the 4th year implementation, upon evaluation of school's readiness, the SDO may recommend to RO QAD for evaluation, validation and ocular inspection and submit all the required documents. The Regional Inspectorate Team (RIT) in cooperation of the SDO Inspectorate Team, shall schedule validation and ocular inspection to the school.

AREA 1: GOVERNANCE

- 1.1 Application Process for Special Curricular Programs in Science
 - 1.1.1 Evaluation Sheet for the Application on the Implementation of Special Curricular Programs in Science for Elementary Schools
 - 1.1.2 Evaluation Sheet for the Application on the Implementation of Special Curricular Programs in Science for Secondary Schools
- 1.2 Learner Admission Process
 - 1.2.1 Conduct of Admission Exam for SCP-Science
 - 1.2.2 Alternative Admission Process in Light of Public Emergency Situation
- 1.3 Student Transfer

1.1 Application Process for Special Curricular Programs in Science

Enclosure of RM No. 303, s. 2016 provides the process flow for adoption/ recognition of schools implementing SCP.



The conduct of pre-evaluation, evaluation and ocular inspection by SDO and RO personnel shall be done using the Evaluation Sheet for the Application on the Implementation of Special Curricular Programs in Science found in the next pages.

**1.1.1 Evaluation Sheet for the Application on the Implementation of
Special Curricular Programs in Science for Elementary Schools**

School Name			
Address			
Division		Date Applied	
School Head		Cellphone No.	
SSES Coordinator		Cellphone No.	

CHECKLIST OF REQUIREMENTS

No.	Parameters	MOVs	/ or X
A. Admission Process			
1	The school widely disseminates information on SSES admission.	Photos of posters, information drive, web posts, etc	
2	The school annually conducts pre-screening and shortlisting of learner-aspirants through document evaluation and interview.	Accomplishment report	
3	The school conducts admission exam, reading comprehension test, and admission procedures as prescribed by the Regional Office	Accomplishment report and evaluation results	
4	The school conducts mental ability test (optional).	Evaluation results	
B. Class Management			
5	The school has a maximum 35 pupils per class/section.	List of successful learner-aspirants	
6	The school has two sections for SSES pupils.		
C. Curriculum and Instruction			
7	The class schedule provides longer instruction time for English, Mathematics, and Science.	Approved class program from Grades 1 to 6	
8	The system of grading shall be based on recent DepEd Orders on assessment (DepEd Order No. 8, s. 2015 and DepEd Order No. 31, s. 2020).	Class record	
9	Performance tasks in Science include regular laboratory activities distributed across all quarters.	Learners' evaluated laboratory activities	
10	Written tests and performance tasks across all subjects promote the development of critical thinking and 21st-century skills.	Sample written test and performance tasks	

11	Written tests (summative tests) and periodical tests are constructed using Table of Specifications.	Approved TOS and TQ	
12	Designs special programs (extra and co-curricular activities) to enhance talents and expertise of pupils including those in other learning areas.	Narrative report with photos on school-based extra and co-curricular activities	
13	Participation of pupils in development activities such as leadership training workshops, seminars, and conferences for the past three (3) years related to the program.	Narrative report with photos	
14	The school has student interest and academic clubs and organizations like Campus Journalism, Science Club, Mathematics Club, etc.	List of club officers, club action plans or implemented projects	
15	All SSES learners across all grade levels have maintained a very satisfactory average rating of at least 88% for any grading period, and at least 85% grade for English, Filipino, Mathematics, and Science subjects per grading period.	Randomly evaluated report card or SF9	
16	The school conducts intervention activities to pupils who need special attention to be able to cope with the program requirements. (If not yet observed by the school, label cell with "N/A".)	Accomplishment report with photos for the conducted remedial activity	
17	The school transfers in a pupil for SSES based on the prescribed guidelines enforced by a Memorandum from the Regional Office or Central Office.	School Memorandum (parallel memo)	
D. Human Resources			
18	SSES teachers teaching Science and Mathematics have specialization in either Science and Math and/or relevant trainings.	Relevant certificates	
19	SSES teachers have clear professional and personal development plan as reflected in their Individual Plan for Professional Development (IPPD) formulated annually.	Filled IPPD	
20	SSES teachers have participated in program-related seminars, conferences, and workshops.	Relevant certificates	
21	The School Head created a committee for SSES Admission Process.	School Memorandum	

22	The School Head monitored and provided guidance to SSES teachers in formulating their Individual Program for Professional Development (IPPD).	Monitoring Report with photos	
23	The School Head allocates enough MOOE budget for the implementation of SSES.	Approved WFP and SIP.	
24	The School Head maintains active partnership with GOPs and NGOs for the continuous implementation of the project.	Documentation on school and external stakeholder partnerships dedicated for SSES	
E. Physical Resources			
25	The school has a functional Science and Mathematics Laboratory.	STEM Laboratory	
26	The school has functional Computer Laboratory.	ICT Laboratory	
27	The school has functional Library with sufficient print resources for all subjects.	School Library	
28	The STEM Laboratory is equipped with Science and Mathematics apparatuses and equipment.	Inventory of STEM Laboratory apparatuses and equipment.	
29	The STEM Laboratory is properly managed by a laboratory in-charge who has no advisory.	Borrower's receipts, laboratory signages/posters and other relevant lab structuring	
30	The STEM Laboratory is regularly utilized for Science and Mathematics activities.	Filled logbook	

Evaluation: [] Complete [] Not Complete

Summary of Findings:

Recommendations:

Evaluated by:

Date:

**1.1.2 Evaluation Sheet for the Application on the Implementation of
Special Curricular Programs in Science for Secondary Schools**

School Name			
Address			
Division		Date Applied	
School Head		Cellphone No.	
Program Coor		Cellphone No.	

CHECKLIST OF REQUIREMENTS

No.	Required Documents	MOVs	/ or X
A. Admission Process			
1	The school widely disseminates information on RSHS, LSHS, or STE admission.	Photos of posters, information drive, web posts, etc	
2	The school annually conducts pre-screening and shortlisting of learner-aspirants through document evaluation and interview.	Accomplishment report	
3	The school conducts admission exam, reading comprehension test, and admission procedures as prescribed by the Regional Office	Accomplishment report and evaluation	
B. Class Management			
4	STE schools should have a maximum 40 students per class/section, while RSHS and LSHS should have a maximum 35 students per class/section.	List of successful learner-aspirants	
5	STE schools shall have a maximum of two sections only, while RSHS and LSHS can have more than two sections depending on the sufficiency of resources.		
C. Curriculum and Instruction			
6	The class schedule provides longer instruction time for Enhanced Science and Enhanced Mathematics subjects.	Approved class program from Grades 7 to 10	
7	The school includes at least two additional S&T oriented elective subjects per grade level.		
8	The school has produced scientific researches either as outputs and/or as entries for research competitions/presentations/publications.	Research papers	

9	The system of grading shall be based on recent DepEd Orders on assessment (DepEd Order No. 8, s. 2015 and DepEd Order No. 31, s. 2020).	Class record	
10	Performance tasks in Science include regular laboratory activities distributed across all quarters.	Learners' evaluated laboratory activities	
11	Written tests and performance tasks across all subjects promote the development of critical thinking and 21st-century skills.	Sample written test and performance tasks	
12	Written tests (summative tests) and periodical tests are constructed using Table of Specifications.	Approved TOS and TQ	
13	Designs special programs (extra and co-curricular activities) to enhance talents and expertise of pupils including those in other learning areas.	Accomplishment report on school-based extra and co-curricular activities	
14	Participation of students in development activities such as leadership training workshops, seminars, and conferences for the past three (3) years related to the program.	Accomplishment report	
15	The school has student interest and academic clubs and organizations like Campus Journalism, Science Club, Mathematics Club, Research Club, etc.	List of club officers, club action plans or implemented projects	
16	All students across all grade levels have maintained a very satisfactory average rating of at least 88% for any grading period.	Randomly evaluated report card or SF9	
17	The school conducts intervention activities to students who need special attention to be able to cope with the program requirements. (If not yet observed by the school, label cell with "N/A".)	Accomplishment report with photos for the conducted remedial activity	
18	The school transfers in a student based on the prescribed guidelines enforced by a Memorandum from the Regional Office or Central Office.	School Memorandum (parallel memo)	
D. Human Resources			
19	Teachers teaching Science and Mathematics have specialization in either Science and Math and/or relevant trainings.	Relevant certificates	

20	Teachers have clear professional and personal development plan as reflected in their Individual Plan for Professional Development (IPPD) formulated annually.	Filled IPPD	
21	Teachers have participated in program-related seminars, conferences, and workshops.	Relevant certificates	
22	The school has Scientific Review Committee.	Approved list of SRC Officers/ Members (School Memorandum)	
23	The School Head created a committee for SCP-Science Admission Process.	School Memorandum	
24	The School Head monitored and provided guidance to teachers in formulating their Individual Program for Professional Development (IPPD).	Monitoring Report with photos	
25	The School Head allocates enough MOOE budget for the implementation of SCP-Science.	Approved WFP and SIP.	
26	The School Head maintains active partnership with GOPs and NGOs for the continuous implementation of the project.	Documentation on school and external stakeholder partnerships dedicated for SCP-Science	
E. Physical Resources			
27	RSBS and LSBS have separate laboratories for Physical Sciences and Life Sciences.	Physical Science Laboratory and Life Science Laboratory	
28	RSBS and LSBS have functional research centers.	Research center with equipment for scientific researches	
29	STE schools have functional Science and Mathematics Laboratory.	STEM Laboratory	
30	The school has functional Computer Laboratory.	ICT Laboratory	
31	The school has functional Library with sufficient print resources for all subjects.	School Library	

32	The STEM Laboratory is equipped with Science and Mathematics apparatuses and equipment.	Inventory of STEM Laboratory apparatuses and equipment.	
33	The STEM Laboratory is properly managed by a laboratory in-charge who has no advisory.	Borrower's receipts, laboratory signages/posters and other relevant lab structuring	
34	The STEM Laboratory is regularly utilized for Science and Mathematics activities.	Filled logbook	

Evaluation: [] Complete [] Not Complete

Summary of Findings:

Recommendations:

Evaluated by:

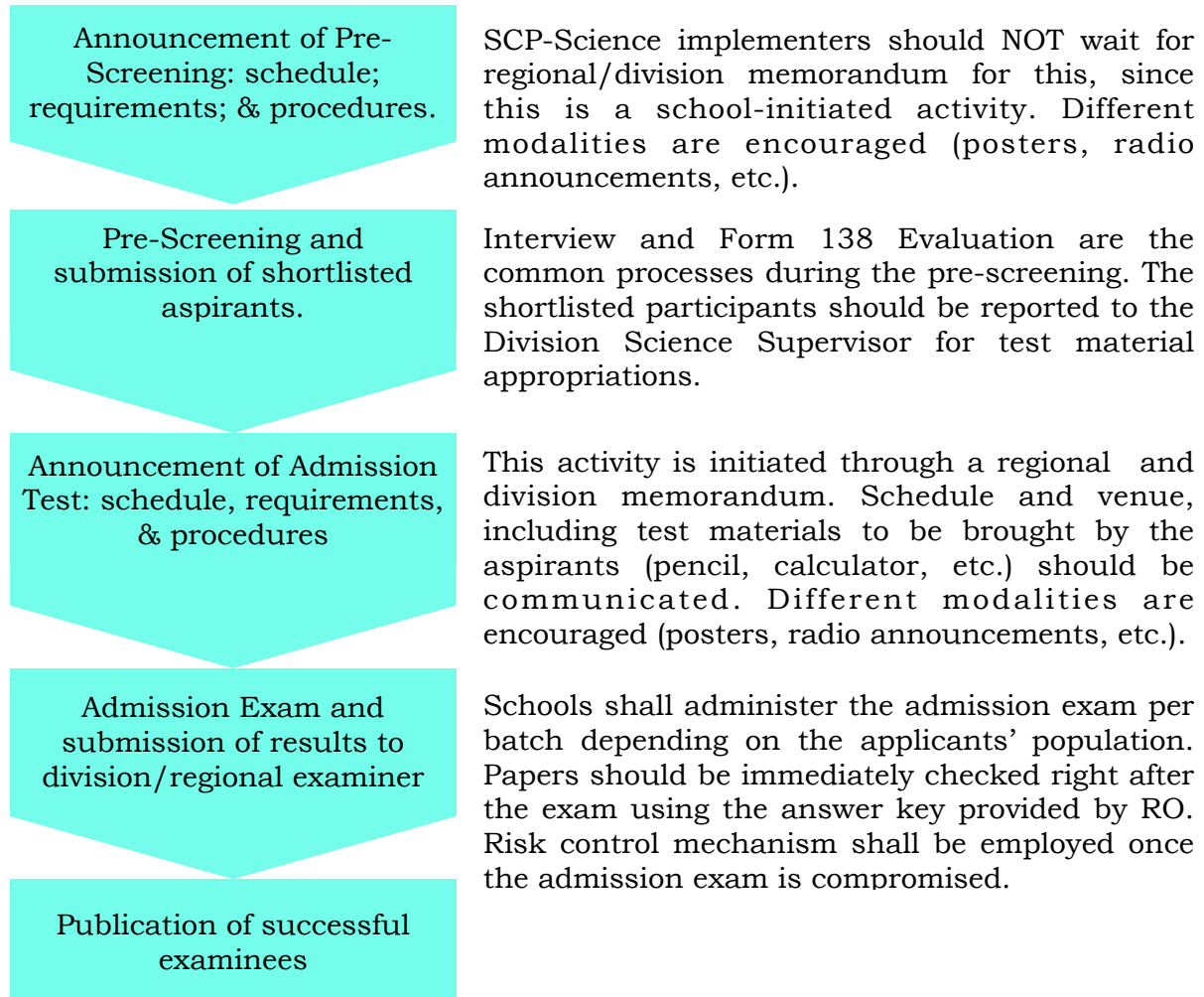
Date:

The M&E Tool for SCP-Science Application Status (for School applicant) found in Chapter VIII of this manual shall be filled by the School Head immediately after each application milestone. The said form shall be reported to the Division Science Coordinator during the Division PIR for SCP-Science. Division Science Coordinators shall consolidate the reports using similar M&E Tool for SCP-Science Application Status (for Division Science Coordinator). The consolidated M&E Tool for SCP-Science Application Status shall be reported during the Regional PIR for SCP-Science.

1.2 Learner Admission Process

1.2.1 Conduct of Admission Exam for SCP-Science

Admission process for SSES is open for all incoming Grade 1 pupils while RSHS, LSHS, and STE is open for all incoming Grade 7 students. The admission process is divided into two: (1) pre-screening (school-initiated); and (2) admission exam. SCP implementers have the prerogative to design their own pre-screening process to shortlist the aspirants. The shortlisted aspirants shall then be subjected to admission test initiated by the RO. Below is the process flow for SSES, RSHS, LSHS, and STE Admission:



1.2.2 Alternative Admission Process in Light of Public Emergency Situation

During emergency situations where admission exam is impossible to administer due to public regulations and protocols, admission process for SSES, RSHS, LSHS, and STE Program shall use the following criteria:

For SSES incoming Grade 1 learners:

- | | |
|--|------------|
| Early Childhood Care Development (ECCD) Checklist | 50% |
| - Get the sum of the scaled scores in all 7 Domains | |

- Consider the standard score when multiplying by 50%

Progress Report Card 50%

- Consider the child's performance in the 4th quarter
- Assigned points in every descriptive rating as follows:
Beginning (1 point)
Developing (3 points)
Consistent (5 points)
- Consider the total points when multiplying by 50%

Note: Rank the learners based on the points earned in the above criteria.

For RSHS, LSHS, and STE incoming Grade 7 students:

Average Rating of the following subjects in Grade 6 45%

- Science (15%)
- Mathematics (15%)
- English (15%)

General Average in Grade 6 30%

Type of School 25%

- SPED and Special Science Elementary Schools 25%
- Higher Education Institution/State Universities and Colleges WITH admission test 25%
- Central/Pilot/Private/Regular/Non-Central 20%

Note: The type of School from where the learners came from is given points since learners from SPED, Special Science Elementary Schools, and identified HEIs/SUCs underwent selection process and qualifying examination.

Regional Memorandum for this effect, whether implementing the normal or alternative admission process, shall be issued annually by the RO. Test construction using Table of Specification (TOS) and test questionnaire shall be privately delegated by the RO to the identified ad hoc committee. Risk control mechanism when the TQ is compromised shall be constructed and implemented by the Regional Science Coordinator to the affected SDO. All exam paraphernalia enclosed in properly sealed envelopes shall be immediately surrendered to the SDOs. SDO shall immediately destroy the exam paraphernalia in consonance to applicable record disposal guidelines.

1.3 Student Transfer

Per issuances on the implementation of Special Curricular Programs in Science, the following guidelines shall be observed by all implementers in terms of student transfer.

RSHS. Caraga Regional Science High School shall only accept transferee students coming from other recognized RSHS and DOST-Philippine Science High Schools (PSHS) in the country.

LSHS. Legislated Science High Schools shall only accept transferee students from RSHS, other LSHS, STE, and DOST-PSHS. LSHS are not allowed to admit transferee students coming from the regular basic education curriculum implementers.

STE. Science, Technology and Engineering Program implementers shall only accept transferee students from RSHS, LSHS, other STE implementers, and DOST-PSHS. STE implementers may accept transferee students from regular basic education curriculum implementers provided that they pass the school screening guidelines and/or they undergo bridging program for specialized and elective subjects.

SSES. Implementers of this SCP-Science shall only accept transferee pupils from other SSES implementers, and SPED Centers. SSES implementers may accept transferee pupils from regular basic education curriculum implementers provided that they pass the school screening guidelines and/or they undergo bridging program for specialized and elective subjects.

In cases where RSHS, LSHS, STE, and SSES implementers saw the need in admitting potential and promising learners coming from international schools with S&T-oriented curriculum and/or with STEM-related subjects, higher education institutions, including state universities and colleges shall be consulted and seek approval to the Regional Science Coordinator.

AREA 2: CURRICULUM AND INSTRUCTION

2.1 Subject Distribution and Elective Subjects

2.1.1 Timetable for Special Science Elementary Schools

2.1.2 Timetable for Regional Science High School, Legislated Science High School and Science, Technology and Engineering Program Implementers

2.2 Distribution of Teaching Loads

2.3 Public School Research Centers and Laboratory Management

2.3.1 Establishment of School Research Center

2.3.2 Laboratory Use and Management

2.4 Grading System and Assessment

2.1 Subject Distribution and Elective Subjects

Below are the different timetable for regular, specialized, and elective subjects for SSES, RSHS, LSHS, and STE. The subjects and their corresponding instruction time are based on DepEd Order No. 31, s. 2012 (Policy Guidelines on the Implementation of Grades 1 to 10 of the Kto12 Basic Education Curriculum Effective School Year 2012-2013), while the elective subjects and enhanced Science and Mathematics are based on Policies and Guidelines on the Implementation of the Science, Technology and Engineering (STE) Program at the Secondary Level, and DO No. 57, s. 2011 (Policy Guidelines in the Implementation of the Special Science Elementary Schools Project).

2.1.1 Timetable for Special Science Elementary Schools

GRADE 1 (SSES)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 1	150
MTBMLE 1	250
Araling Panlipunan 1	200
MAPEH 1	200
Filipino 1*	200
English 1*	200
Enhanced Math 1*	300
Enhanced Science 1**	300
Computer Science 1**	200

*Longer instruction time

**Elective subjects

GRADE 2 (SSES)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 2	150
MTBMLE 2	250
Araling Panlipunan 2	200
MAPEH 2	200
Filipino 2	250
English 2	250
Enhanced Math 2*	300
Enhanced Science 2**	300
Computer Science 2**	200

GRADE 3 (SSES)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 3	150
MTBMLE 3	250
Araling Panlipunan 3	200
MAPEH 3	200
Filipino 3	250

GRADE 4 (SSES)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 4	150
EPP	250
Araling Panlipunan 4	200
MAPEH 4	200
Filipino 4	250

English 3	250
Enhanced Math 3*	300
Enhanced Science 3*	300
Computer Science 3**	80
Research 3**	120

*Longer instruction time

**Elective subjects

English 4	250
Enhanced Math 4*	300
Enhanced Science 4*	300
Computer Science 4**	80
Research 4**	120

GRADE 5 (SSES)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 5	150
EPP 5	250
Araling Panlipunan 5	200
MAPEH 5	200
Filipino 5	250
English 5	250
Enhanced Math 5*	300
Enhanced Science 5*	300
Computer Science 5**	80
Research 5**	120

*Longer instruction time

**Elective subjects

GRADE 6 (SSES)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 6	150
EPP 6	250
Araling Panlipunan 6	200
MAPEH 6	200
Filipino 6	250
English 6	250
Enhanced Math 6*	300
Enhanced Science 6*	300
Computer Science 6**	80
Research 6**	120

2.1.2 Timetable for Regional Science High School, Legislated Science High School and Science, Technology and Engineering Program Implementers

GRADE 7 (RSHS, LSHS, & STE)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 7	120
Araling Panlipunan 7	180
MAPEH 7	240

GRADE 8 (RSHS, LSHS, & STE)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 8	120
Araling Panlipunan 8	180
MAPEH 8	240

Filipino 7	240
English 7	240
Enhanced Math 7*	400
Enhanced Science 7*	400
Creative Tech. 7*	240
Research 7**	240

*Specialized subjects

**Elective subjects

Filipino 8	240
English 8	240
Enhanced Math 8*	400
Enhanced Science 8*	400
Creative Tech. 8*	240
Research 8**	240

GRADE 9 (RSHS, LSHS, & STE)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 9	120
Araling Panlipunan 9	180
MAPEH 9	240
Filipino 9	240
English 9	240
Enhanced Math 9*	400
Enhanced Science 9*	400
Creative Tech. 9**	240
Research 9**	240

*Specialized subjects

**Elective subjects

GRADE 10 (RSHS, LSHS, & STE)	
Subjects	No. of Mins/Week
Homeroom Guidance	60
EsP 10	120
Aral. Panlipunan 10	180
MAPEH 10	240
Filipino 10	240
English 10	240
Enhanced Math 10*	400
Enhanced Science 10*	400
Creative Tech. 10**	240
Research 10**	240

Electronic copies of all Curriculum Guides for specialized subjects (Enhanced Science, Enhanced Mathematics, and Creative Technologies) and elective subjects (Computer Science and Research) are downloadable at

2.2 Distribution of Teaching Loads

In consonance to the ISO's roadmap of the regional office in achieving better NAT results, all schools, as much as possible, should distribute the subjects to their teacher specialists. Below are the load distribution guidelines. They are unnumbered not to emphasize priority levels.

- Science specialists will do rotation instruction among four (4) domains in regular Science subjects (example: Physics major will teach the domain for Force and Motion). The domain for Earth and Space can be taught by BSE-General Science teachers.
- If there is a shortage of Science specialists, BSE-General Science teachers may take over to teach other domains in the regular Science subject. Take

note that different grade levels start with different domains. School must strategize wise distribution of their available science specialists. For schools with limited science specialists, Biology/Chemistry specialists may teach Living Things and their Environment, and Matter. Physics specialists can teach Force and Motion, and Earth and Space domains.

- Only teacher specialists can teach elective subjects. Cases where a BSE-General Science teacher teaches elective subject can only be possible if he/she has background experiences (example: a BSE-General Science teacher teaching research because of his/her research experiences).
- In cases where teacher resources in the JHS are limited, JHS-STE can tap specialists from SHS-STEM to teach specific domains in the regular Science subjects and/or elective subjects.
- Schools, as much as possible, distribute Research subjects to the SIP advisers. Further, these teachers should not be given class advisory, instead shall be designated as laboratory in-charge for time, proximity, technical, and co-curricular advantages.
- QUALITY INSTRUCTION IS ALWAYS OUR PRIORITY.

2.3 Public School Research Centers and Laboratory Management

2.3.1 Establishment of School Research Center

RSHS, LSHS, and STE schools are encouraged to establish their research centers by:

1. creating JHS Research Club (for students);
2. creating Scientific Review Committee (an ad hoc committee in school that reviews all research papers for outside presentation and/or publication, could be students' Science Investigatory Projects and/or teachers' action and/or basic researches, this committee shall sign official INTEL-ISEF Forms for SIP entires either for local to international competitions); and
3. purchasing laboratory equipment and or apparatuses related to the chosen research field

School Scientific Review Committee shall be composed of six (6) teaching personnel who have background in research. Specifically, their roles are as follows:

Members	Roles
Chairman	The chairman evaluates the correctness and coherence of information declared in the INTEL-ISEF Forms vis-a-vis research methodology. The chairman is preferably has experiences in SIP contest.
Vice Chairman	The vice chairman evaluates the overall rigor of research and provides assistance to data analytics (quantitative and qualitative). The vice chairman is preferably a master's degree holder.
Ethics Reviewer	The ethics reviewer checks the integrity of the research processes, claims, copyrights, data anonymity and confidentiality.

Plagiarism Checker	The plagiarism checker evaluates the originality of the research paper using online plagiarism checkers. He/she ensures that all research entries for regional, national, and international research fairs are 100% original.
Bibliography Tracer	The bibliographic tracer ensures that all cited authors in the research paper are duly recognized in the reference or bibliography section. He/she ensures that all sources are formatted to correct and prescribes referencing style.
Technical Expert	The technical expert checks all syntaxes, grammars, structures, and overall format of the research by providing annotations and/or marginal comments in the manuscript.

Schools have the freedom to establish their own SRC vis-a-vis school context. However, all schools participating to regional, national, and international science and/or research fairs and exhibits shall make sure that all papers are carefully reviewed by the School and Division SRC to avoid disqualifications in Regional and National Science and Technology Fair.

2.3.2 Laboratory Use and Management

All SCP implementers should maximize the use of their laboratories to develop the 21st century skills of the learners by providing them with laboratory activities coherent to the required performance standards. To ensure that all learning laboratories are properly managed, the following suggested measures shall be taken by the school implementers:

- JHS-STE and SHS-STEM should have a separate science laboratory.
- These laboratories, as much as possible, should NOT be included as regular classroom during class programming to accommodate students from ALL curricular programs, while at the same time function as research center in schools.
- JHS-STE can use the equipment and resources from SHS-STEM laboratory and vice versa. However, no equipment (specially sensitive balances and equipment) shall be transferred out to another laboratory, except for cases that are reasonable.
- All laboratories should be managed by teacher(s) who is/are trained with laboratory management (Basic Laboratory Procedures Training) or who has/have background in laboratory management.
- Lab in-charge, as much as possible, should not have a class advisory. Schools can also strategize by making their SIP advisers as lab in-charge to maximize time, proximity, and resource advantage.
- All laboratories should have clerical forms (at least borrower's logbook and borrower's receipt) necessary for laboratory management.
- All laboratories should have posters on precautionary measures, laboratory emergency evacuation plan, and fire extinguishers.

2.4 Grading System and Assessment

Regular subjects and elective subjects should follow the grading system and assessment guidelines found in DepEd Order No. 08, series of 2015 Re: Policy

Guidelines on Classroom Assessment for the K to 12 Basic Education Program. In light of public emergency, assessment shall adhere to DepEd Order No. 31, s. 2020 or Interim Guidelines for Assessment and Grading in Light of the Basic Education Learning Continuity Plan.

All test questionnaires (TQ) used for periodical exams should be designed carefully using a Table of Specifications (TOS). The distribution of the items per cognitive levels should be coherent with recent issuances on assessments. Strictly, no TOS no printing of TQ policy. TOS alongside with TQ shall be checked by teachers' immediate head or by the school personnel who is delineated by the School Principal to carry out the task. Monitoring and Evaluation Tool for the checking of TOS and TQ is found in PIRF 4 in this manual.

AREA 3: MONITORING AND EVALUATION

3.1 Program Implementation Review

PIRF 1: Enrollment

PIRF 2: Learners' Academic Proficiency

PIRF 3: Learning Delivery

PIRF 4: Assessment Development

PIRF 5: Issues and Concerns in the Implementation of SCP-Science

3.1 Program Implementation Review

In addition to quarterly CLMD-CID Convergence reports, special monitoring and evaluation form for RSHS, LSHS, STE, and SSES will be used for program implementation review (PIR). The schedule of yearly PIR shall be conducted thirty (days) days after the last day of the School Year. Notice for annual PIR for SCP-Science shall be communicated via Regional Memorandum. It is understood that the forms below shall also be accomplished by all schools which will be collected and consolidated by the Division Science Coordinators. All SDOs are encouraged to conduct a Division PIR to be attended by the School Heads of the SCP-Science implementers fifteen (15) days after the last day of the School Year. Any findings that are evaluated shall be communicated to the concerned school implementer or personnel as technical assistance.

Below are the forms to be filled and reported during the PIR Division and Regional PIR for SCP-Science:

PIRF 1: Enrollment

The empty cells in PIRF 1 should contain the population of learners according to sex, with a summative under the “Total” column. SDO may disseminate the same matrix to the schools for SDO PIR.

A. SSES

Grade Level	SY 2019 to 2020			SY 2020 to 2021			SY 2021 to 2022		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Grade 1									
Grade 2									
Grade 3									
Grade 4									
Grade 5									
Grade 6									
Total									

B. RSHS, LSHS, and STE

Grade Level	SY 2019 to 2020			SY 2020 to 2021			SY 2021 to 2022		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Grade 7									
Grade 8									
Grade 9									
Grade 10									
Total									

PIRF 2: Learners' Academic Proficiency

The empty cells in PIRF 2 should contain the number of learners who belong to the various proficiency levels segregated by sex. Users of this tool should refer to the quarterly general average in the SF9. Table A should contain the consolidated data from Grades 1 to 6. Likewise, Table B should contain the consolidated data from Grades 7 to 10. SDO may disseminate the same matrix to the schools for SDO level PIR.

A. SSES

Proficiency Levels		No. of elementary learners in each proficiency bracket											
		SY 2019 to 2020				SY 2020 to 2021				SY 2021 to 2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Did not meet expectation 70 - 74	M												
	F												
	T												
Fairly Satisfactory 75 - 79	M												
	F												
	T												
Satisfactory 80 - 84	M												
	F												
	T												
Very Satisfactory 85 - 89	M												
	F												
	T												
Outstanding 90 - 100	M												
	F												
	T												

B. RSHS, LSHS, and STE

Proficiency Levels		No. of elementary learners in each proficiency bracket											
		SY 2019 to 2020				SY 2020 to 2021				SY 2021 to 2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Did not meet expectation 70 - 74	M												
	F												
	T												
Fairly Satisfactory 75 - 79	M												
	F												
	T												

Satisfactory 75 - 79	F												
	T												
Satisfactory 80 - 84	M												
	F												
	T												
Very Satisfactory 85 - 89	M												
	F												
	T												
Outstanding 90 - 100	M												
	F												
	T												

PIRF 3: Learning Delivery

The first column should contain the list of subjects per grade level. Each quarter has three columns: Number of Learning Competencies (LCs); Number of Covered LCs; and Number of Uncovered LCs. If the uncovered LC is zero, then there is no need to supply the causes or reasons of the uncovered LCs in the last column. This table shall be accomplished by grade level. To qualify a certain LC as uncovered, a school with the highest number of uncovered LCs shall be considered in SDO-level reporting. Example, if there are 2 SSES in an SDO and one of the SSES implementers declared that they have 2 uncovered LCs in Quarter 1 while the other is zero, then at SDO level of consolidation, the 2 uncovered LCs shall be reflected.

Subjects	Quarter 1			Quarter 2		
	No. of LCs	Covered LCs	Uncovered LCs	No. of LCs	Covered LCs	Uncovered LCs

Quarter 3			Quarter 4			Reasons of the Uncovered LCs
No. of LCs	Covered LCs	Uncovered LCs	No. of LCs	Covered LCs	Uncovered LCs	

PIRF 4: Assessment Development

PIRF 4, Table A shall be used in consolidating data collected using the Table B. In Table A, subjects should be enumerated in column 1. The proceeding columns under Quarters 1 to 4 shall reflect the number of developed TOS and TQ. Take note that the maximum number of TOS and TQ developed should be according to the number of schools implementers and teachers handling the subjects. The last column in Table A shall qualitatively discuss the challenges in the development and administration of quarterly assessment. To consolidate, the EPS shall add the total number of TOS and TQ developed per subject per quarter.

A. For SDO Use

Subjects	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Challenges in the Development of Assessment
	TOS	TQ	TOS	TQ	TOS	TQ	TOS	TQ	

PIRF 4, Table B shall be used by Science Department Head of designated teaching personnel who is assigned to peruse the developed TOS and TQ. The first column should contain the name of the teacher, while the second column contains the subject he or she is teaching. The name of the teacher may recur few times depending on the number of subjects he or she is handling. In the columns for TOS and TQ from Quarters 1 to 4, the checker shall put check marks if the teacher submits TOS and TQ. Observations in the perused TOS and TQ including delays in the submission and other issues shall be qualitatively recorded in the last column. This M&E tool shall be reported to the SDO in either annual or quarterly basis depending on the decision of the EPS.

B. For School Use

Name of Teachers	Subjects	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Observations on the Developed Assessment
		TOS	TQ	TOS	TQ	TOS	TQ	TOS	TQ	

PIRF 4 can only be used when quarterly examinations are implemented. For remote and emergency situations where quarterly examinations are suspended, PIRF 4 shall be exempted in the annual Regional PIR.

PIRF 5: Issues and Concerns in the Implementation of SCP-Science

The tables below should capture qualitative data on areas like instructional management, assessment of learning, and learning resource management and development. One table should be for elementary (SSES) while the other is for secondary (consolidated table for RSHS, LSHS and STE).

A. SSES

Schools Division Office: _____					
No. of SSES Implementers: _____					
Objectives/ Targets	Strategies/ Activities	Persons Involved	Resources Needed	Time Frame	Expected Output
KRA 1: Instructional Management					
KRA 2: Assessment of Learning					
KRA 3: Learning Resource Management and Development					
Prepared by: _____			Noted by: _____		
EPS-Science			CID Chief		

A. RSHS, LSHS and STE

Schools Division Office: _____					
No. of RSHS Implementer: _____					
No. of LSHS Implementers: _____					
No. of STE Implementers: _____					
Objectives/ Targets	Strategies/ Activities	Persons Involved	Resources Needed	Time Frame	Expected Output
KRA 1: Instructional Management					
KRA 2: Assessment of Learning					
KRA 3: Learning Resource Management and Development					

Prepared by:	Noted by:
EPS-Science	CID Chief

Effectivity and Revisions

This contextualized manual shall take effect once enforced by a Regional Memorandum. If there are changes in the manual concerning Curriculum and Instruction, specially in part 2.1 (Subject Distribution and Elective Subjects), changes shall take effect in the proceeding School Year.

Call for revisions to revise specific parts of this manual can be casted in either parliamentary or pseudo-parliamentary motions. During official meetings with EPSs in Science, a motion to revise specific parts in the manual can be raised. Pseudo-parliamentary invitation to revise parts can be casted through text motions which will be laid by the Regional Science Coordinator into poll voting. Either way, when a motion to revise a specific part reaches more than 50% (or 7) of the votes, a notice for special meeting for revision shall be made through a Regional Memorandum.

Depending on the context and degree of revisions, the Regional Office may invite proper personalities like school heads, departments heads, and /or teachers of the SCP-Science implementers. Once the revisions are carried, the identity marking in the lower-right corner of the cover page containing the version number are released date shall be updated.