

Government of Madras.

EDUCATIONAL DEPARTMENT.

Recd.

Regd.

} 1915.

Enclosures

Spare copies

G.O. No. 618, 12th June 1915.

Nature study

Approving the proposals of the Director of Public Instruction for improving the instruction in "Nature study" in elementary schools and sanctioning the deputation of certain officers for special training and lecturing for a period of one year from the 1st July 1915.

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GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following papers :—

I

Letter—from the Hon'ble Mr. H. S. DUNCAN, M.A., Acting Director of Public Instruction.

To—the Secretary to Government, Educational Department.

Dated—Madras, the 10th April 1915.

No.—5968.

Among the subjects discussed at the Conference of Inspectors of Schools held at Ootacamund about the middle of June last, was that of the teaching of "Nature study" or "Elementary rural science" in elementary schools and it was then suggested that further consideration be referred to a Committee composed of officers of the educational and agricultural departments. Accordingly, a Committee consisting of Messrs. Champion, Kershaw and R. Satagopa Ayyangar of the Educational Department and Messrs. Wood and Sampson of the Agricultural Department was formed under the direction of the Directors of Public Instruction and of Agriculture and met at Coimbatore in August of last year. A copy of the terms of reference to this Committee and of its report thereon is attached hereto, from which it will be observed that the Committee recommends that means should be devised for improving the instruction to be given on this subject by (1) the preparation of suitable courses of study to be given in training and elementary schools, (2) the provision of an appropriate text-book and (3) the training of teachers in this subject. The main object in view is to disseminate what is useful and requisite and to give instruction to pupils in elementary schools. Such an end can only be successfully achieved by elementary school teachers who must themselves have received the necessary instruction in the training institutions. The majority of the assistance in training institutions are however not as yet competent to treat the subject properly and so the first step should be to improve their qualifications. The Committee therefore decided that three Natural science L.Ts. who have specialized in Botany, Zoology and Geology respectively and who are officers of this department might be deputed to undergo training under the Government Botanist and the Government Entomologist in the Agricultural College, Coimbatore, in the Fisheries Bureau and in the Government Museum for a period of three months or so, and that they should with the experience thus gained be requested to draw up tentative syllabuses to be used in training schools. They could then be usefully employed in the Teachers' College under the general supervision and direction of the Principal of that College in delivering courses of lectures to selected teachers, about 25 in number, chosen from among teachers ordinarily employed as masters in training institutions and possibly from among students under training. The men thus trained would revert or be sent to the training schools with a view to their teaching the elementary teachers under training. I consider that the recommendations of the Committee are sound. General instructions can be issued under my orders to the selected officers and the experience of the Principal of the Teachers' College will be made available to them during the preparation of their schemes of study. I have accordingly the honour to submit the proposal for approval

and to request that you will be so good as to obtain the sanction of Government for

1. M.R.Ry. V. R. Duraiswami Sastri, M.A., L.T., Headmaster, Government Training School, Tanjore.
2. M.R.Ry. M. O. Parthasarathy Ayyangar, M.A., L.T., Assistant, Teacher's College, Saidapet.
3. M.R.Ry. M. R. Subrahmanya Ayyar, B.A., L.T., Assistant, Teacher's College, Saidapet.

the deputation of the three marginally-noted officers for special training and lecturing for a period of twelve months from 1st July next on their present pay and the usual travelling allowance for their journeys in connection with their work. The Director of Agriculture, the Superintendent, Government Museum and the Director of Fisheries, who have been consulted, have expressed their willingness to give their assistance in the working of the scheme.

2. On receipt of orders from Government, the selected officers will be directed to frame their plan of work under the guidance of the Principal, Teachers' College, and to attach themselves to the appropriate institutions at Coimbatore and Madras. The period of training in each institution and the dates on which such period should commence and terminate will be settled in consultation with the officers in charge of the institutions to which it is proposed that these officers should be attached.

ENCLOSURES.

(1)

Terms of Reference.

- (a) What it is desired to teach in elementary schools under the head of "Nature study"
- (b) What it is possible to teach the class of children which attend such schools.
- (c) Whether the present instruction realizes what is desired as far as is possible.
- (d) What means might be adopted to have the instruction actually given in elementary schools in this subject approximate as nearly as possible to the instruction that is considered desirable and possible in these schools, and in particular how the courses in the training schools can be amended to improve the teaching of this subject in elementary schools.
- (e) To what extent it is desirable that officers in the Agricultural Department should assist at such training and how that should be done.

Note.—The Committee is not precluded from discussing any other relevant topic that may present itself in the course of their discussions.

(2)

Findings of the Committee appointed in the Director of Public Instruction's Proceedings, R.O.C. No. 5968 of 1914, dated 17th July 1914.

- (a) In consideration of the fact that the method of teaching Rural Science is more important than the information given, the Committee do not feel themselves called upon to prescribe a detailed syllabus in a subject which is admittedly wide and undefined. They consider that as a general rule the subjects of study should mainly be drawn from the animal and plant life of the locality, because these subjects lend themselves most readily to correct methods of teaching. The study of the weather, the sky, the ground and the air, will be included in so far as they are necessary to the proper understanding of animal and plant life.
- (b) The above subjects will not in the opinion of the Committee, be beyond the time available or the capabilities of either the teacher or the pupils, provided the recommendation made in paragraph (d) below are accepted.
- (c) The Committee consider that the present instruction does not realize as far as possible what is desired. The teacher of the Nature study has up to the present proved a failure for the following reasons.—

- (1) The present scheme is not conceived in accordance with accepted ideas.
- (2) The incapacity of the teacher.
- (3) The absence of facilities.

(d) The Committee consider that the means for improving the instruction to be given in this subject in elementary schools may be considered under the following heads :—

- (1) The preparation of suitable courses of instruction to be substituted for the present courses prescribed in the "Scheme of work for Training schools" and "The scheme of studies in elementary schools."

- (2) The provision of a text-book.
- (3) The training of the teachers in the subject.

(1) The Committee agree with opinions previously expressed that agriculture should find no place as a subject in the elementary schools, and they accordingly recommend the omission of that subject from Training school course. They consider further that the courses of Nature study mentioned above should be superseded by two new courses on the lines mentioned in paragraph (a) above, entitles "Elementary rural science". These will be suitable for use in elementary and training schools respectively. We recommend that elementary course be divided into two sections, the first to end with the IV standard. The preparation of this course and the consequent text-book is a matter of the first importance and in the opinion of the Committee can only be produced as a result of the closest collaboration between a member of the Educational Department, and one or more responsible officers with a scientific training and a knowledge of rural conditions. In this connection the names of the Piscicultural Expert, the Lecturing Botanist, the Curator of the Madras Museum and an Agricultural officer may be mentioned. In framing this course, the Committee consider that it is necessary to differentiate between the needs of the rural and urban schools, and in view of the preponderating importance of the former, the Committee suggest that at present the needs of the rural school only need be considered.

(2) The provision of a text book necessarily follows from the above, and in its preparation similar co-operation is desirable. This book should contain not only subject matter but directions as to the treatment of that matter.

The Committee further consider that this text-book should be compiled by a departmental officer, on the ground that it is only such an officer who is likely to have sufficiently wide knowledge of the various and varying conditions of this Presidency or can get into touch with persons who possess such knowledge. In view of the far reaching importance which would attach to such a text-book, the Committee consider that no pains should be spared to make it thoroughly effective they would emphasize especially the need for certain amount of illustration, and would submit that if necessary, Government funds might usefully be employed in subsidising its production.

(3) The elementary course outlined above is ultimately to be taught in Elementary schools by elementary school teachers (T.1). These teachers (T.1) will continue to be trained in training schools by the school staff (T.2). It is not considered that at present this staff (T.2) are competent to give the necessary instruction, and the Committee recommend that selected (T.2) Science L.Ts. (preferably Natural Science) be deputed to undergo a special course of training in this subject. This special course is to be given by a few (T.3) its duration will be not less than six months and not more than a year, the exact duration will depend on experience. This course will not be initiated until the courses are definitely settled.

The procedure suggested is thus as follows:—Three recently trained Natural Science L.Ts. whose subjects have been respectively Botany, Zoology and Geology should be selected and attached for three months to suitable institutions, e.g., the Entomological and Botanical sections of the Agricultural Department, the Madras Museum, the Government Fishing Bureau. After the completion of this brief training and the compilation of a tentative scheme, these men will proceed to teach in a special training school, the prescribed course to the selected T.2s.

The question of translation is one which offers some difficulty especially in the translation of the names of the objects studied. It is suggested that this difficulty might be solved by the submission of lists from each T.2s. from which a standard compilation could be evolved.

The Committee are fully aware that these proposals are far reaching and aim at a standard considerably in advance of anything hitherto contemplated, but they consider that the desired improvement will not be effected by anything less, and express the hope that it will be found possible to put them into effect.

(e) The assistance of the officers of the Agricultural Department may be given in the following ways:—

(1) In the compilation of the courses and the text-book both in supplying subject-matter and illustrations;

(2) The training of the T.3s. so far as it concerns the Agricultural Department;

(3) The inspection of the special training schools when the T.3s. are teaching the T.2s. In this connection Coimbatore would probably be the most suitable place for the establishment of such a training school.

11th August 1914.
11th August 1914.
11th August 1914.
11th August 1914.
12th August 1914.

H. CHAMPION.
H. O. KERSHAW.
H. C. SAMPSON.
R. SATAGOPA AYYANGAR.
R. CECIL WOOD.

Order—No. 618, Educational, dated 12th June 1915.

The Government approve the proposals of the Director of Public Instruction contained in his letter read above for improving the instruction in "Nature study" in elementary schools. They also sanction the deputation of the undermentioned officers for special training and lecturing for a period of twelve months from the 1st July 1915 on their present pay and the usual travelling allowance for their journeys in connection with their work.

(1) M.R.Ry. V. R. Duraiswami Sastri, M.A., L.T., Headmaster, Government Training school, Tanjore.

(2) M.R.Ry. M. O. Parthasarathi Ayyangar, M.A., L.T., Assistant, Teachers' College, Saidapet.

(3) M.R.Ry. M.R. Subrahmanya Ayyar, B.A., L.T., Assistant, Teachers' College, Saidapet.

2. The Director of Public Instruction will be requested to submit a re-appropriation statement for meeting the expenditure involved by the present proposal.

(True Extract.)

P. RAJAGOPALA ACHARIYAR,
Secretary to Government.

To the Director of Public Instruction.
" Accountant-General.
" Revenue Department (with copy of note.)
" Financial Department.

EDUCATIONAL DEPARTMENT.

NOTES CONNECTED WITH G.O. No. 618, EDUCATIONAL,
DATED THE 12TH JUNE 1915.

[SUBJECT.—*Deputation of certain officers of the Educational Department in connection with the framing of syllabuses on nature study and elementary rural science.*]

Previous papers :

G.O.	424,	Educational,	1st July	1911.
"	1066	"	3rd December	1912.
"	928,	Revenue,	26th March	1914.
"	1652	"	8th June	"
"	1152,	Educational,	9th October	"

From the Director of Public Instruction, dated 10th April 1915, No. 5968.

Submitted that the proposals of the Director of Public Instruction contained in his current letter may be approved with the concurrence of Revenue and Financial.

2. The total cost on account of the salary of the officers to be selected comes to Rs. 2,700.* Including travelling allowance and other contingencies it may be roughly put down at Rs. 3,000. The expenditure for the current year on account of salary will be Rs. 1,800. Including travelling allowance, etc., the total outlay for the current year may be taken as Rs. 2,000. The Director of Public Instruction has not proposed how this amount is to be met. He may probably find it by re-appropriation.

S.A.—22-4-15.

C.R.—23-4-15.

The proposals appear to be quite sound. May I take it that the Director of Public Instruction will find the money by re-appropriation?

P. RAJAGOPALA ACHARIYAR—26-4-15.

To the Director of Public Instruction.

OFFICE OF THE DIRECTOR OF PUBLIC INSTRUCTION.

The charge may be met from the savings in the provision for the pay and personal allowance of Mr. Middlemast who has been granted nine months' leave.

H. S. DUNCAN—2-5-15.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

The file may now be forwarded u.o. to Revenue and Financial.

S.A.—3-5-15.

C.R.—3-5-15.

P.R.—5-5-15.

To the Revenue and Financial Departments.

REVENUE DEPARTMENT.

The Director of Public Instruction proposes to depute three officers of the Educational Department to undergo training under the Government Botanist and the Government Entomologist in the Agricultural College, Coimbatore, and in the Fisheries Bureau for a period of three months or so. It is intended that with the experience gained by the training, the officers should draw up syllabuses on nature study or elementary rural science and deliver courses of lectures to selected teachers in the Teachers' College, Saidapet. The Director of Agriculture and the Honorary Director of Fisheries have expressed their willingness to give their assistance in the working of the scheme. It does not therefore seem necessary to refer the case to the Board of Revenue or the Honorary Director of Fisheries for remarks. Submitted that this department may agree to the proposal and that the file may be passed on to Financial.

R.V.—12-5-15.

D.J.—12-5-15.

M.R.N.—12-5-15.

C.R.—15-5-15.

A. H. A. TODD—15-5-15.

Yes. [Will Educational kindly send Revenue a notes copy of the order passed in due course.]

L. DAVIDSON—17-5-15.

To the Financial Department.

FINANCIAL DEPARTMENT.

The Accountant-General may be consulted u.o.

T.H.R.—20-5-15.

L. E. KERSHAW—22-5-15.

To the Accountant-General.

OFFICE OF THE ACCOUNTANT-GENERAL.

There is no account objection to the proposal being sanctioned by Government.

2. The proposed transfer of funds from the group head "Salaries" requires the sanction of Government in the Financial Department. The Director of Public Instruction may be requested to submit a specific re-appropriation statement for the sanction of Government.

P. MOHAN RAO—27-5-15.

To the Financial Department.

FINANCIAL DEPARTMENT.

The proposal may be accepted in Financial. The Educational Department may be asked to direct the Director of Public Instruction to submit a specific re-appropriation statement as desired by the Accountant-General for the sanction of Government. With these remarks the file may be returned to Educational.

P.K.K.—31-5-15.

T.H.R.—31-5-15.

L.E.K.—2-6-15.

Yes, it may be accepted in Financial but Honourable Member, Financial, should see.

It is comforting to find that the folly of including agriculture in the training school course is now fully recognized.

A. BUTTERWORTH—3-6-15.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

A draft order is submitted. If approved, it may be submitted to His Excellency the Governor and Honourable Member, Financial.

S.A.—5-6-15.

C.R.—5-6-15.

P. RAJAGOPALA ACHARIYAR—8-6-15.

P[ENTLAND]—9-6-15.

H. A. S[TUART]—10-6-15.

Issue.

P.R.—12-6-15.

[G.O. No. 618, Educational, dated 12th June 1915.]

ORDINARY.

PRESS SLIP.

PREFERENCE.

URGENT (a).

Educational

DEPARTMENT.

Current No. dated 191

G.O. No. 118201, dated 12. 6. 1915.

Number of MS. pages sent {
(b) Correspondence 12
(b¹) Notes 6

Brief subject *W.D. overleaf*

(c) Number of copies required when struck off (not including copies for volumes and editors' table which are retained in the Press).	E. T. copies to supply requisitions for purchase by the public.	Complete correspondence and orders.	Notes.
FOR RECORD.*			
Madras Records ...	4	2	21
Ooty Records ...		2	8
For filing with original ...			1
Total ..		9	20

FOR ISSUE.†

	Letter only.	Complete G.O.	(b) Special issue copies of G.O.		Notes.
			No.	Papers.	
Signature copies.....		5			
India Office.....					
Govt. of India..... Dept.					
Revenue Department.....		5			
Public Works Department.....					
Local and Municipal Department.....					
Educational Department..... Dept.					
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Spare copies

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Total ..		50			

INSTRUCTIONS FOR THE SECRETARIAT.

(a) If a paper is marked to be printed urgently, the Superintendent of the section concerned should sign the Press slip. The Superintendent should exercise a careful discretion in the matter.

(b) Each letter, memorandum, or order, or set of orders, in the file of correspondence should be headed in succession with the Roman numeral I, II, III, etc., the number being written in red ink or blue chalk above the item. The particular papers to be printed in the special issue-copies should be indicated by the Roman numeral (I, II, etc.) by which that item has been headed in the correspondence file. All matter, including marginal remarks or references, to be printed should be written in ink and matter which should not be printed should be encircled. Initials and signatures that are not quite legible should be re-written distinctly.

(b¹) For rules regarding printing of notes, see rule 315 of the office Manual.

(c) The number of copies and the details of distribution should be filled in by the Superintendent or Referencer concerned.

(d) In the absence of special instructions to the Press to keep matter standing for a specified period, ordinary papers of 8 pages and under will be kept standing for one week, and larger papers for two weeks only. The type of notes and of all confidential papers is distributed immediately after striking.

(e) This slip, properly and completely filled in, should accompany every paper sent to Press; it will be returned by the Press when proofs are furnished; it should be sent to the Press when a call is made for revised proofs or when a corrected proof is sent for striking. When finally returned by Press it should be filed with the original order or letter.

INSTRUCTIONS FOR THE PRESS.

(a) If, in the opinion of the Superintendent of the Press, a paper has been marked urgent unnecessarily, he should send the Press slip to the Registrar with a remark to that effect.

(b) Unless a note to the contrary is made against the matter, pencil entries should not be printed. The Superintendent of the Press may bring to the notice of the Registrar any instance of incomplete or careless editing.

(c) Signature copies of letters to the Secretary of State or to the Government of India should be printed on hand-made paper.

(d) This slip should be returned by the Press to the Secretariat when proofs are furnished; it will be sent back to the Press when proofs are returned corrected and should be finally returned to the Secretariat when struck-off copies are supplied.

(e) The names of the Secretary and Members should be printed in full when they occur on the right hand side, only the first time when they appear on the left side, the initials alone being printed later.

* Copies distributed on (Press Clerk).

† Copies distributed on (Press Despatcher).

† To be initialled and dated.

(3) Mr. M.R. Subrahmanya Ayyar,
B.A. L.T., Assistant, Teachers' College,
Saidapet.

2. The D.P.D. will be requested
to submit a re-appropriation Statement
for meeting the expenditure involved
by the present proposal.

Sd/-
5.6.15. 5/6/15

[Handwritten signature/initials]

Signed by
8/7/15

Approved -
12.6.15
Noted in C.S.
14.6.15

To The

D.P.D.
A.S.

Revenue Dept (with copy of notes)
Financial

12/6/15

17/7/15

TOTAL 1200 600 700 100