

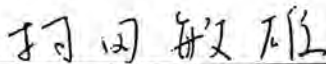
**Minutes of Discussions**  
**on**  
**the Basic Design Study**  
**on**  
**the Project for Infrastructural Support and Educational Equipment to**  
**National Teacher Training College in Maseru**  
**in the Kingdom of Lesotho**  
**(EXPLANATION ON DRAFT REPORT)**

In July 2000, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Project for Infrastructural Support and educational Equipment to National Teacher Training College in Maseru (hereinafter referred to as "the Project") to the Kingdom of Lesotho (hereinafter referred to as "Lesotho"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the Study.

In order to explain and to consult with the Lesotho on the components of the draft report, JICA sent to Lesotho the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Toshio MURATA, Development Specialist, Institute for International Cooperation, JICA, from July 19 to July 31, 2000.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

Maseru, July 26, 2000



Mr. Toshio MURATA  
Leader  
Draft Report Explanation Team  
Japan International Cooperation Agency



Mr. C. MOSHAPANE  
Deputy Principal Secretary  
Ministry of Education

Witness



Mr. C.M. MOHAPI  
Principal Economic Planner  
Ministry of Development Planning

## ATTACHMENT

### 1. Components of the Draft Report

The Lesotho side agreed and accepted in principle the components of the draft report explained by the team.

### 2. Contents of the Project

Both of the Japan and the Lesotho sides have confirmed the requested contents of the Laboratory and Workshop Building, and educational items, which will be constructed or procured under the Japanese Grant Aid attached as Annex- I , - II and - III .

### 3. Responsible and Implementing Agency on the project

3-1 The responsible agency is the Ministry of Education

3-2 The implementing agency is the National Teacher Training College(N.T.T.C.)

### 4. Japan's Grant Aid scheme

The Lesotho side understands the Japan's Grant Aid Scheme as explained by the team and described in Annex- 4 of the Minutes of Discussions signed by both parties on April 19, 2000.

### 5. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Lesotho side by November, 2000.

### 6. Other relevant issues

6-1 The Lesotho side agreed to complete the implementation of the major undertaking for

Laboratory and Workshop Building, and Educational Equipment, as explained by the team and described in Annex- 5 and - 6 of the Minutes of Discussions signed by both parties on April 19, 2000.

6-2 The Lesotho side agreed to complete the implementation of the following undertakings until the end of March, 2001, when the construction will commence.

6-2-1) Relocation of the existing electric cable and poles from existing place to suitable places,

6-2-2) Leveling of ground in the site for construction

6-3 The Lesotho side agreed to provide the site for construction with necessary facilities and utilities such as distribution of electricity, water supply, drainage, telephone line at the adequate time during construction work.

6-4 The Lesotho side agreed to take any measures for customs clearance, exemption of internal tax, import tax and other fiscal levies as explained by the team and described in

Annex- 5 and -6 of the Minutes of Discussions signed by both parties on April 19, 2000.

6-5 The Lesotho side agreed to allocate appropriate budget and teaching staff to ensure proper and effective operation and maintenance of the facility and equipment provided under the project.

6-6 Both the Japan and Lesotho sides confirmed that the site for construction as described in

Annex 1 has been secured for the project and the boundary line of the site has been clarified.

1712





## ANNEX- II

### Requested Facility Items for the Project

Subjects / Fields	Components of Facilities
1. Computer Studies	<ul style="list-style-type: none"><li>- Computer Room</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
2. Home Economics	<ul style="list-style-type: none"><li>- Cooking Workshop</li><li>- Sewing Workshop</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
3. Agriculture	<ul style="list-style-type: none"><li>- Laboratory (1)</li><li>- Laboratory (2)</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
4. Art & Crafts	<ul style="list-style-type: none"><li>- Art Room</li><li>- Craft Workshop</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
5. Physics	<ul style="list-style-type: none"><li>- Laboratory</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
6. Biology	<ul style="list-style-type: none"><li>- Laboratory</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
7. Chemistry	<ul style="list-style-type: none"><li>- Laboratory</li><li>- Staff &amp; Preparation Room</li><li>- Store Room</li></ul>
8. Others	<ul style="list-style-type: none"><li>- Teaching Material Production Rm.</li><li>- Machine Room</li></ul>

Note 1. Both sides confirm that the facility mentioned above includes the related common spaces such as corridors, stairs and storage and the necessary utilities such as electricity, water supply, sewage, and telecommunication etc.

2. The size and capacity of the facility will be determined after further studies.

## ANNEX-III

No.	Description	Q'ty
<b>Computer Studies</b>		
CI- 1	Personal computer with desk & chair	31
CI- 2	U.P.S. system	1
CI- 3	Printer, laser with table	2
CI- 4	Scanner with table	1
CI- 5	Computer projector	1
CI- 6	Local network and network soft	1
CI- 7	Educational software	1
<b>Printing Equipment for Common Use</b>		
PR- 1	Printing machine	1
PR- 2	Book binder	1
PR- 3	Paper cutter	1
PR- 4	Photocopy machine	1
PR- 5	Personal computer with desk & chair	1
PR- 6	Printer with table	1
PR- 7	Scanner	1
PR- 8	Digital camera for computer	1
<b>General Science</b>		
GC- 1	Water distillation	1
GC- 2	Waste water treatment	1
GC- 3	Chemicals	1
GC- 4	Glasswares	1
<b>Biology</b>		
BI- 1	Stereoscopic microscope	30
BI- 2	Microscope for student	15
BI- 3	Analytical microscope	2
BI- 4	Microscope with camera	1
BI- 5	Dissecting kit	30
BI- 6	Dissecting tray set	8
BI- 7	Simple microtome	8
BI- 8	Magnifier	8
BI- 9	Paraffin specimen apparatus	1
BI- 10	Slide preparation kit	1
BI- 11	Dyeing tray	1
BI- 12	Desicator with vacuum pump	3
BI- 13	Colony counter	8
BI- 14	Models, several kinds	1
BI- 15	Specimen, several kinds	1
BI- 16	Prepared slide, several kinds	1
BI- 17	RNA protein synthesis kit	1
BI- 18	DNA molecular kit	1
BI- 19	Incubator	1
BI- 20	Sterilizer	1
BI- 21	Sterie box	1
BI- 22	Mixer	1
BI- 23	Water bath	1
BI- 24	Stopwatch	15
BI- 25	Thermometer, mercury and alchol types	8
BI- 26	Min-max thermometer	2
BI- 27	Hygrometer	2
BI- 28	pH Meter with electrode	8
BI- 29	Micrometer	8
BI- 30	Aneroid barometer	1
BI- 31	Hydrometer	1



No.	Description	Q'ty
BI- 32	DO meter	1
BI- 33	Soil analyzer kit	8
BI- 34	Refrigerator	1
BI- 35	Photoelectric colorimeter	1
BI- 36	Experimental tools	1
<b>Chemistry</b>		
CH- 1	Hoffman apparatus	1
CH- 2	Water colorimeter	1
CH- 3	Gas generator	8
CH- 4	Eudiometer	1
CH- 5	Electrophoresis apparatus	1
CH- 6	Electricity generation kit	8
CH- 7	Osmotic pressure apparatus	1
CH- 8	Molecular apparatus	1
CH- 9	Soxhlet extractor	8
CH- 10	Liebig condenser	8
CH- 11	pH Meter with electrode	8
CH- 12	Conductivity meter	8
CH- 13	DO meter	1
CH- 14	Polari-sacchari meter	1
CH- 15	Colorimeter	1
CH- 16	Salinometer	1
CH- 17	Magnetic stirrer	8
CH- 18	Autoclave	1
CH- 19	Centrifuge	1
CH- 20	Thermostatic water bath	1
CH- 21	Drying oven	1
CH- 22	Hot plate	1
CH- 23	Cork borer machine	1
CH- 24	Glass working tool	2
CH- 25	Thermometer, mercury and alcohol types	8
CH- 26	Stopwatch	8
CH- 27	Balance	2
CH- 28	Analytical balance	1
CH- 29	Molecular structure model	1
CH- 30	Refrigerator	1
CH- 31	Experimental tools	1
<b>Physics</b>		
<b>Motion &amp; Force</b>		
PH- 1	Lever and inclined experimental app.,	1
PH- 2	Wheel & axle	1
PH- 3	Pulley set	8
PH- 4	Spring balance set	8
PH- 5	Recording timer with tape	8
PH- 6	Dynamics rail and cart	1
PH- 7	Linear air track with accessories	1
PH- 8	Inertia experimental apparatus	1
PH- 9	Rotary table with accessories	1
PH- 10	Gyroscope	1
PH- 11	Spiral spring	8
PH- 12	Stopwatch	15
<b>Wave and Vibration</b>		
PH- 13	Ripple tank	1
PH- 14	Standing wave experimental app.,	1
PH- 15	Pendulum set	8

No.	Description	Q'ty
<b>Liquid</b>		
PH- 16	Pascal's principle apparatus	1
PH- 17	Water pressure apparatus	8
PH- 18	Hydrometer	1
<b>Gas</b>		
PH- 19	Mardeburg h]emisphrers	1
PH- 20	Vacuum experimental apparatus	1
PH- 21	Mercury manometer	1
PH- 22	Vacuum pump	1
PH- 23	Boyle's & charles' law app.,	1
<b>Heat</b>		
PH- 24	Water colorimeter	1
PH- 25	Linear expansion apparatus	1
PH- 26	Solid expansion apparatus	1
PH- 27	Min-max thermometer	2
PH- 28	Thermometer, mercury and alchol types	8
<b>Light</b>		
PH- 29	He Ne laser	1
PH- 30	Optical apparatus	4
PH- 31	Optical set	1
PH- 32	Young's experimental set	1
PH- 33	Lux meter	1
PH- 34	Spectroscope, direct vision	1
PH- 35	Grating	2
PH- 36	Polarizing plate	2
<b>Sound</b>		
PH- 37	Tuning fork set	1
PH- 38	Resonant column apparatus	1
PH- 39	Audio amplifier	1
<b>Magnetic</b>		
PH- 40	Magnetic set	8
PH- 41	Magnetizing coil	1
PH- 42	Compass	8
PH- 43	Gauss meter	1
<b>Static Electricity</b>		
PH- 44	Electrostatic apparatus	1
PH- 45	Leyden jaar	1
PH- 46	Parallel plate condenser app.,	1
PH- 47	Electrostatic generator	1
<b>Electric Current</b>		
PH- 48	Hand generator set	8
PH- 49	Circuit experimental apparatus	1
PH- 50	Rheostat	8
PH- 51	Resistor	8
PH- 52	Ohm's law experimental app.,	1
PH- 53	Voltage-current apparatus	1
PH- 54	Fleming's law apparatus	2
PH- 55	Motor set	8
PH- 56	Coil set	2
PH- 57	Variable autotransformer	2
<b>Electricity</b>		
PH- 58	Voltmeter, AC,DC	8
PH- 59	Ammeter, AC,DC	8
PH- 60	Galvanometer	8
PH- 61	Electricity kit	8



No.	Description	Q'ty
PH- 62	Oscilloscope	2
PH- 63	Circuit tester	8
PH- 64	Multimeter, digital	8
PH- 65	Function generator	1
PH- 66	Frequency counter	1
PH- 67	LCR meter	2
PH- 68	Lead & wire sets, 10 pcs.,	15
<b>Electron</b>		
PH- 69	e/m measuring apparatus	1
PH- 70	Milikan apparatus	1
PH- 71	Photoelectric effect apparatus	1
PH- 72	Radiation detector	1
<b>Electric Power</b>		
PH- 73	Electric power supply	8
PH- 74	Voltaic cell	8
<b>Measuring Instrument</b>		
PH- 75	Balance, analytical	2
PH- 76	Balance, double beam	4
PH- 77	Vernier caliper	8
<b>Agriculture</b>		
<b>Plant</b>		
AG- 1	Conductivity meter	8
AG- 2	Hydrometer	8
AG- 3	Fertilizer densitometer	8
AG- 4	Lux meter	8
AG- 5	Digital balance	4
AG- 6	Thermometer,mercury and alchol types	8
AG- 7	Hygrometer	8
AG- 8	Max-mini thermometer	1
AG- 9	Barometer	1
AG- 10	Anemometer	1
AG- 11	Rain gauge	1
AG- 12	Soil thermometer	8
AG- 13	Electrical scale	8
AG- 14	Soil auger	8
AG- 15	Soil pH meter	8
AG- 16	Soil humidity meter	8
AG- 17	Soil sieves set	1
AG- 18	Soil analysis kit	8
AG- 19	Soilless culture set	2
AG- 20	Green house indoor use	1
AG- 21	Plant models, several kinds	1
<b>Animal</b>		
AG- 22	Lactometer	2
AG- 25	Animal models, several kinds	1
<b>Common use</b>		
AG- 26	pH Meter	8
AG- 27	Centrifuge	1
AG- 28	Stereoscopic microscope	15
AG- 29	Microscope for student	8
AG- 30	Analytical microscope	2
AG- 31	Dissecting kit	15
AG- 32	Dissecting tray set	8
AG- 33	Simple microtome	4
AG- 34	Colony counter	8

## Equipment List

No.	Description	Q'ty
AG- 35	Dyeing tray	4
AG- 36	Desicator, vacuum type	3
AG- 37	Vacuum pump	1
AG- 38	Electrical hot plate	1
AG- 39	Incubator	1
AG- 40	Drying oven	1
AG- 41	Paraffin specimen apparatus	1
AG- 42	Slide preparation kit	1
AG- 43	Magnifier	8
AG- 44	Photoelectric colorimeter	1
AG- 45	Ion distillatory apparatus	1
AG- 46	Refrigerator	1
AG- 47	Chemicals etc.,	1
AG- 48	Glasswares	1
AG- 49	Experimental tools	1
<b>Home Economics</b>		
<b>Sewing Workshop</b>		
HE- 1	Sewing machine, foot operated	5
HE- 2	Sewing machine, electric, straight	2
HE- 3	Sewing machine, multi-type	2
HE- 4	Sewing machine, straight stitch	2
HE- 5	Steam electric iron	4
HE- 6	Shear, 4 kinds	30
HE- 7	Dressmaker's full length mirror	1
<b>Cooking workshop</b>		
HE- 8	Table top gas burner	2
HE- 9	Stove, gas with oven	7
HE- 10	Stove electric oven	2
HE- 11	Microwave oven	1
HE- 12	Refrigerator	1
HE- 13	Deep freezer	1
HE- 14	Kitchen set	9
HE- 15	Cooking set	9
HE- 16	Pudding steamer	9
HE- 17	Pressure cooker	4
HE- 18	Trolley	2
HE- 19	Reflective mirror	1
HE- 20	Dish rack	4
<b>Art and Craft</b>		
AC- 1	Display board	2
AC- 2	Model, 7 kinds	1
AC- 3	Color samples	1
AC- 4	Easel and board	15
AC- 5	Cutting set	15
AC- 6	Chemicals etc.,	1
AC- 7	Apron for protection with grobe	31
AC- 8	Kiln with temperature control	1
AC- 9	Potters wheel electric type	6
AC- 10	Potters wheel , foot operated	2
AC- 11	Crafting tools	15
AC- 12	Crafting accessories	1
AC- 13	Pug milling machine	1

**Extent of Works (DRAFT)**

<b>Portions by the Japanese Side</b>	<b>Portions by the Lesotho Side</b>	<b>Rough Cost Estimation (Rand)</b>
<p>(1) Building Works Structure works, finishing works</p> <p>(2) Electrical Works Power trunk facilities, lighting, power outlets, P/A systems</p> <p>(3) Utilities and Facilities</p> <p>a) Water Supply Construction works for the Water supply from the valve at the water supply meter to the building and all the related internal works for the water supply.</p> <p>b) Sewerage system including piping works up to the connection manhole</p> <p>c) Sanitation facilities (waste water treatment facility)</p> <p>d) Elevated tank and reserve tank</p> <p>e) Fire-extinguishing facilities</p> <p>f) Electrical Cabling works</p> <p>g) Generator Works</p> <p>h) Telecommunications system Cabling works from MDF/PABX to the facilities, and installation of conduit from the site border line to MDF.</p> <p>i) Lightning Protection System</p> <p>j) External Lighting system in the site</p> <p>(4) Exterior Work Road, path and parking lots within the site</p> <p>(5) Equipment Equipment for the Project</p> <p>(6) Electric Room, Electric Generator Room, Pump Room</p> <p>(7) Incinerator</p>	<p>(1) <u>Site Preparation</u></p> <p>a) Ground preparation including the clearance and leveling of the land, demolition of existing facilities and repair of the existing fence.</p> <p>b) Temporary power and water supply for construction</p> <p>(2) <u>External Works and Approach Roads</u> Landscaping, planting, and fence, etc within the Site.</p> <p>(3) <u>Utilities and Facilities for New Buildings</u></p> <p>a) Water Supply Construction from the main feeder to the water valve at the water supply meter including the water supply meter.</p> <p>b) Sewerage Piping works from the connection manhole at the site to the existing sewerage line including the repair work of the existing ditch.</p> <p>c) Storm Drainage Drainage line from the site to the existing line including the expansion work of the existing drainage line.</p> <p>d) Electrical Work Cabling works from the existing power supply point to the new Electrical room in the new Building. Relocation work of the existing electrical cable and poles in the site to suitable locations (using underground cable).</p> <p>e) Telecommunication Work Cabling works (for Direct/Extension) from the MDF/PABX in the existing Administration building to Point Distribution in the new building.</p> <p>f) The provision of gas (LPG) cylinders for the Lab.</p>	<p>(1) <u>Site Preparation</u></p> <p>a) -</p> <p>b) -</p> <p>(2) <u>External Works and Approach Roads</u> R 30,000.00</p> <p>(3) <u>Utilities and Facilities</u></p> <p>a) R 30,829.31</p> <p>b) R 30,836.10</p> <p>c) -</p> <p>d) R 148,254.00  (Connection Charge R 32,000) (Consumer Deposit R 100)</p> <p>e) R 5,252.14</p> <p>f) R 170.00</p>

Portions by the Japanese Side	Portions by the Lesotho Side	Rough Cost Estimation (Rand)
	<p>(4) <u>Others</u></p> <p>a) Governmental works including the application for and obtaining of Governmental approvals and permissions</p> <p>b) Smooth custom clearance, tax exemptions and prompt internal transportation for the imported construction materials and equipment</p> <p>c) Commissions to the Japanese foreign exchange bank for its banking services based upon the Banking Arrangement namely the advising commission of the “ Authorization to Pay” and payment commission</p> <p>(5) Tax exemptions and necessary preferential treatment for the construction staff from Japan or other countries</p> <p>(6) Smooth entry , re-entry and departure to/from Lesotho for the Japanese technical staff</p> <p>(7) Installation of General Furniture</p> <p>(8) Management, operation and maintenance cost for the new building and facilities</p> <p>(9) All the expenses, other than to be borne by Japan’ s Grant Aid within the scope of the Project</p>	<p>(4) <u>Others</u></p> <p>a) ( 0.5% of Construction Cost )</p> <p>b)</p> <p>c)</p> <p>(5)</p> <p>(6)</p> <p>(7)</p> <p>(8)</p> <p>(9)</p>

## 初等教育における就学状況

表1 1998年3月の年齢別初等学校在籍状況

年齢	1年生	2年生	3年生	4年生	5年生	6年生	7年生	年齢別 在籍数計
未満	695							695
6	9,323	573						9,896
7	20,507	4,690	318					25,515
8	17,798	12,335	2,963	161				33,257
9	10,438	14,925	8,492	2,210	233			36,298
10	5,310	11,986	11,622	5,891	1,662	141		36,612
11	2,703	8,284	11,876	10,330	4,553	1,538	207	39,491
12	1,361	4,555	8,550	9,748	7,397	4,061	1,454	37,126
13	742	2,717	6,058	9,153	8,716	6,820	3,821	38,027
14	411	1,478	3,942	7,125	8,409	8,006	6,171	35,542
15	188	792	2,247	4,604	6,456	7,328	7,564	29,179
16	190	320	1,156	2,639	4,229	5,582	6,920	21,036
17		304	585	1,411	2,526	3,735	5,738	14,299
18			337	545	1,110	1,845	3,246	7,083
19				343	481	891	1,799	3,514
20					250	342	772	1,364
以上						174	409	583
計	69,666	62,959	58,146	54,160	46,022	40,463	38,101	369,517
* 学齢人口	59,203	58,618	57,940	57,147	56,229	55,218	54,107	398,462
** 学齢児童 就学率	15.7%	8.0%	5.1%	3.9%	3.0%	2.8%	2.7%	*** 6.0%
**** 初等教育における純就学率								54.76%

出典：教育省教育統計、1998年

注：ここでは12月30日時点の年齢を採用（以降の資料も同様）

表は各学年の最低年齢から12歳上までの幅で、それ以上の年齢となる児童は最高年齢の項に含まれる。例えば、1年生の16歳は190人であるが、実際にはそれ以上の年齢も含む。

\*学齢人口とは、各学年に相当する年齢の児童数を指す。例えば、1年生の適正年齢は6歳、2年生は7歳・・・7年生は12歳である。

\*\* 該当学年における「レ」国適齢就学人口中で、適齢児童が学ぶ人数の割合を示す。例えば、  
 $15.74\% (1\text{年生適齢就学率}) = 9,323 (6\text{歳児生徒数}) \div 59,203 (適齢就学人口) \times 100$

\*\*\* 総就学率、すなわち、

$$6.0\% = 23,840 (各学年適齢就学生徒数合計) \div 398,462 (適齢就学人口) \times 100$$

\*\*\*\* 6歳から12歳までの就学児童 部分 218,195人  $\div$  部分 398,462人  $\times 100$

初等教育における退学率

表2 初等学校における学年別退学率(%)

学年 年	1年生		2年生		3年生		4年生		5年生		6年生		7年生	
	男	女	男	女	男	女	男	女	男	女	男	女	男	女
1992	14.1	11.9	7.8	6.2	9.6	6.2	10.9	6.7	11.9	9.0	12.6	9.9	5.4	3.7
1993	9.7	7.6	2.1	-0.2	4.9	0.2	6.6	2.9	7.9	4.1	8.9	6.4	-1.6	2.3
1994	10.1	7.9	3.1	1.1	5.3	1.8	8.6	3.8	9.3	5.0	9.0	5.2	1.9	-1.9
1995	13.7	10.6	7.8	4.2	8.8	5.1	10.9	6.5	11.3	7.1	10.5	10.0	11.2	7.2
1996	10.7	9.1	6.0	3.6	6.9	4.7	9.6	5.6	9.7	6.7	10.7	8.8	5.3	7.6
1997	8.7	5.5	6.2	1.8	6.7	3.5	8.6	5.5	8.2	3.8	11.3	7.9	6.8	6.4

出典：教育省教育統計 1998年

初等教育における教育成果の状況 (Primary School Leaving Examination)

表3 1992～1998年の第7学年最終試験(PSLE)結果

年	7年生 生徒数	受験 志願者	合格者数	不合格者数	志願者中 合格率	全7年生中 合格率
1992	31,647	30,387	26,623	3,764	87.6%	84.1%
1993	31,776	30,776	29,034	1,742	94.3%	91.4%
1994	32,532	31,396	27,042	4,354	86.1%	83.1%
1995	35,798	35,018	25,157	9,875	71.8%	70.3%
1996	39,271	38,216	30,280	7,936	79.2%	77.1%
1997	38,418	36,885	28,630	8,255	77.6%	74.5%
1998	38,099	37,607	27,802	9,805	73.9%	73.0%

出典：教育省教育統計 1998年

初等教育における学校数、教室数、一教室あたり児童数、教員児童率

表4 初等教育の学校数・一教室あたり児童数

年	学校数	教室数	生徒総数	一教室：生徒
1992	1,201	4,139	362,657	1：87.6
1993	1,209	4,312	354,275	1：82.2
1994	1,232	4,464	366,569	1：82.1
1995	1,240	4,869	378,011	1：77.6
1996	1,249	4,947	374,628	1：75.7
1997	1,259	5,179	368,895	1：71.2
1998	1,264	5,377	369,515	1：68.7

出典：教育省教育統計 1998年

注：ここでは、キリスト教系教会およびホールは含まない

**表 5 初等教育の有資格教員児童比率**

年	総児童数	有資格教員数	*教員：児童 率
1992	362,657	5,573	1 : 65
1993	354,275	5,688	1 : 62
1994	366,569	5,702	1 : 64
1995	378,011	5,919	1 : 64
1996	374,628	5,861	1 : 64
1997	368,895	6,272	1 : 59
1998	369,515	6,385	1 : 58

出典：教育省教育統計 1998 年、人口統計 1996 年

注：\*ここでは無資格教員を含まない

**表 6 初等教育における 1994 年～1998 年一教室あたり児童数別の教室数\***

児童数 / 教室	15 人未満	15 ~ 24	25 ~ 34	35 ~ 44	45 ~ 54	55 ~ 64	65 ~ 74	75 ~ 99	100 ~ 149	150 人以上
1994	191	552	970	1,438	1,479	1,113	661	707	194	11
1995	190	577	1,051	1,469	1,520	1,250	716	734	207	12
1996	190	567	1,100	1,582	1,735	1,110	619	607	165	10
1997	214	639	1,295	1,809	1,585	1,085	591	495	140	16
1998	224	662	1,331	1,821	1,598	1,101	604	477	130	8

出典：教育省教育統計、1998 年

注：ここではキリスト系教会およびホールが数えられている

初等教育教員の資格状況

**表 7 初等教育における教員の資格状況**

年	有資格教員	(%)	無資格教員	教員数 計
1992	5,573	79.0	1,478	7,050
1993	5,688	78.0	1,604	7,292
1994	5,702	76.8	1,726	7,428
1995	5,919	74.7	2,004	7,923
1996	5,861	74.2	2,037	7,898
1997	6,272	77.5	1,817	8,089
1998	6,385	78.2	1,785	8,170

出典：教育省教育統計、1998 年



中等教育（普通科前期・後期 および 技術・職業教育）就学状況

表 8 中等教育(前期・後期)就学状況

年	就学生徒数		就学生徒数 合計	中学適齢人口 (13～17歳)	*純就学率
	男子	女子			
1990	18,630	27,671	46,301	191,928	-
1992	21,106	30,789	51,895	199,841	-
1994	25,020	36,595	61,615	208,081	-
1996	27,742	39,712	67,454	216,661	32.0%
1998	29,540	41,692	71,232	254,313	30.0%

出典：教育省教育統計 1998 年

注：\*中等教育の適正学齢 13 歳から 17 歳の該当年齢全人口に対する、適齢生徒数の割合

表 9 1990 年～1998 年の中等学校就学生徒の年齢状況

年齢	1990	1992	1994	1996	1997	1998
未満	21	341	43	78	40	19
12	266	997	339	680	226	125
13	1,580	2,843	1,629	2,500	1,107	740
14	3,456	5,280	4,557	6,201	3,192	2,736
15	6,423	7,868	7,881	8,613	6,844	6,177
16	8,256	9,089	10,134	11,412	11,000	10,127
17	8,475	8,513	10,680	11,949	11,758	12,044
18	7,487	6,857	9,511	10,033	11,795	11,851
19	4,523	4,615	7,256	6,858	9,864	10,035
20	3,058	2,673	4,676	4,416	6,872	7,370
21	1,388	1,417	2,404	2,337	4,417	4,673
22	784	670	1,200	1,048	2,201	2,660
23	294	319	658	497	1,111	1,322
24	161	176	284	381	504	597
以上	201	237	363	451	814	756
計	46301	51,895	61,615	67,454	71,475	71,232

出典：教育省教育統計 1998 年

中等教育の教育成果状況

( Junior Certificate および Cambridge Oversea School Certificate )

表 10 1990～1998 年の JC 資格試験結果

年	*受験者数	合格者数	不合格者	受験者合格率	**純修了合格率
1990	7,462	4,421	3,041	59.2 %	27.7 %
1992	7,935	4,485	3,450	56.5 %	27.0 %
1994	10,593	6,536	4,057	61.7 %	35.2 %
1996	11,732	8,436	3,296	71.9 %	37.3 %
1997	11,832	6,111	5,721	51.6 %	26.9 %
1998	11,716	7,108	4,608	60.7 %	33.7 %

出典：教育省教育統計 1998 年

注：\*ここでの受験者数は第 10 年生の、JC 受験志願者数のみを示す。

\*\*3 年前に 8 年生に入学した生徒（前表の 3 年前 8 年生進学者数）中の JC 合格率

表 11 1990～1998 年の COSC 資格試験結果

年	*受験者数	合格者数	不合格者	受験者合格率	**純修了合格率
1990	3,214	895	135	27.8 %	17.1 %
1992	3,591	1,033	173	28.8 %	19.9 %
1994	4,093	1,552	67	37.9 %	27.4 %
1996	5,263	1,799	133	34.2 %	21.7 %
1997	5,289	1,933	12	36.5 %	21.7%
1998	5,999	1,972	111	32.9 %	19.6 %

出典：教育省教育統計 1998 年

注：\*ここでの受験者数は COSC 受験志願者数のみを示す。

\*\*2 年間で後期中等教育課程を修了し試験に合格した率

表 12 1990 年～1998 年の中等教育学校における生徒の状況

年	Form A～C の間に 生徒が留年もしくは退学する率 (8～10 年生: 前期中等教育)	Form D～E の間に 生徒が留年もしくは退学する率 (11～12 年生: 後期中等教育)
1990	44.9 %	32.9 %
1992	39.4 %	20.7 %
1994	38.4 %	24.3 %
1996	41.4 %	31.8 %
1998	36.2 %	35.6 %

出典：教育省教育統計 1998 年

## 中等教育教員の資格状況

表 13 1998 年における資格の有無別・性別による中等教育教員数

STC 以上の有資格教員		無資格・資格不十分教員*		全教員数	
男	女	男	女	男	女
1,128	1,201	301	360	1,429	1,561
2,329		661		計 2,990	

出典：教育省教育統計 1998 年

注：ここでの資格不十分とは、教員養成を受けていない PH および COSC 資格の者

表 14 1998 年 3 月の中等教育各学年の授業にあたる教員数と資格状況

教員の資格	Degree 以上	STC か同等	PH と COSC*	無資格
前期中等 8/A	808	580	137	372
9/B	881	594	149	343
10/C	941	560	129	254
後期中等 11/D	934	158	48	77
12/E	936	142	44	60

出典：教育省教育統計 1998 年

注：教員数が複数学年を教える場合には、複数回算定されている。

\*PH および COSO は、中等教育教員資格としては厳密には不十分である

## 中等教育（前期および後期）学校の教室数と生徒数の状況

表 15 1990～1998 年における前期・後期中等教育学校の教室・生徒数

年	学校数	教室数	生徒数	学齢全人口*	生徒/教室
1990	175	1,318	46,301	-	35.1
1992	186	1,419	51,895	-	36.6
1994	193	1,576	61,615	-	39.0
1996	203	1,802	67,454	245,711	37.4
1997	204	1,845	71,475	250,090	38.7
1998	205	1,866	71,232	305,708	38.2

出典：教育省教育統計 1998 年、人口統計 1996 年

注：\*中等教育学校 8 年生～12 年生の学齢、すなわち 13 歳～17 歳の人口

7. 「第6次国家開発計画」における教育分野の19政策

プログラム概要

	教育プログラム/政策概要	担当部局
1	<b>幼児育成プログラム</b> 障害児を含む2.5歳児を対象とした、幼児教育の供給。モニタリングおよび幼児教育教員の訓練など。	幼児開発部
2	<b>初等教育プログラム</b> 全初等教育学齢児童への教育の供給、教育の質の向上、学校運営の改善、学校施設・設備の改善など。	初等教育局
3	<b>カリキュラム開発プログラム</b> 学校カリキュラムの改編成、教材開発、教員資格アセスメントなど。	国家カリキュラム開発委員会
4	<b>学校教材・機材調達プログラム</b> 全国の学校への教科書・理科教育機材・補助教材の供与、など。	カリキュラム局 学校調達部
5	<b>学校自治・食糧支援プログラム</b> 生徒への昼食代の支給、農業科・生活技術としての実技科目の実施、留年生徒や退学者への対策など。	学校自治 給食支援部
6	<b>初等教育教員再教育プログラム</b> 教員雇用とスーパーバイズ、多数生徒を担う教員への指導、など。	初等再教育部
7	<b>技術・職業訓練プログラム</b> 産業の要請に応える教育の供給、企業家や若年層・女性の職業技術支援など。	技術・職業教育
8	<b>教育指導プログラム</b> 教員職の社会的地位向上、給与を含む待遇改善、年260名の教員の雇用など。	教育指導局
*9	<b>NTTC 国立教員養成カレッジ・プログラム</b> 大学運営自治権の取得、入学者の増員、無資格教員の再教育、教育と学習の向上、講師のレベルアップ、研究の促進など。	NTTC 国立教員養成カレッジ
10	<b>レトリ・ポリテクニク・プログラム</b> 学校運営自治権の取得、夜間クラスの実施、国内労働者および外国人労働者の技術養成、専門性の向上など。	LP レトリ・ ポリテクニク
11	<b>レソト国立大学プログラム</b> 非学術備品機材と費用削減、研究技術・学術レベル向上など。	NUL レソト国立大学
12	<b>レソト遠隔地教育プログラム</b> 通学に不利な立場にある児童の識字率と理数能力の向上、児童の健康増進、遠隔教育のモニターなど。	レソト遠隔地 教育センター
13	<b>特殊教育プログラム</b> *NTTCにおける特殊教育カリキュラムの改善、障害の問題理解を目的とした、親とコミュニティーへの教育など。	特殊教育部
14	<b>管理運営プログラム</b> 教育省の再編成、教育の地方分散化、政策決定レベル確立、教育財政改革など。	教育省
15	<b>計画部プロジェクト</b> 政策作成アドバイス、開発政策プロポーザル作成、教育のモニタリング・評価技術の確立、教育社会影響・効果の研究など。	計画部
16	<b>教育施設部プロジェクト</b> 学校教育施設の改善、全国学校施設モニタリングなど。	教育施設部
17	<b>統計プログラム</b> 教育政策実施調査、予算配分のための資料収集と分析など。	教育省
18	<b>中等教育プログラム</b> 学校運営の改善、各科目専門教員の雇用、時間割の改善、教員の増員により生徒対教員の比率を25:1にするなど。 教育指導および、公立学校のない地域への学校建設計画など。	中等教育局
19	<b>レソト試験委員会プログラム</b> 教育成果のアセスメント実施、試験の分析、COSC試験改善など。	レソト試験委員会

出典：レ国政府経済計画省 1996年「第6次国家開発計画 1996/7-1998/99」

注：\*本プロジェクト実施運営機関

## 8. コース別年間プログラム

## (1) 初等教育教員養成プログラム

## 初等教育教員養成ディプロマコース

## D.E.P. 科目別授業時間数/週

科目名	1年次	2年次		3年次		4年次		計 時間/週
	学期	2	1	2	1	2	1	
<b>セソト語</b>	5	3	3	3	3	3	3	23
言語学・文学								
<b>英語</b>	5	3	3	3	3	3	3	23
言語学・文学								
<b>数学</b>	5	3	3	3	3	3	3	23
数学概論								
数学技術								
応用数学								
数学モデリング								
<b>科学</b>	5	3	3	3	3	3	3	23
化学								
物理								
生物								
<b>教育専門科目</b>	0	3	3	3	3	3	3	18
教育原理								
教育心理								
教育社会学								
マイクロティーチング								
教育実習準備								
カリキュラム研究								
情報技術								
就学前教育								
特殊教育								
教育法								
研究法								
評価・成績法								
学級経営								
教材研究								
ガイダンス・カンパリング								
<b>応用科学</b>	0	3	3	3	3	3	3	18
農業科								
家庭科								
保健教育								
<b>表現芸術</b>	0	3	3	3	3	3	3	18
美術・工芸								
音楽								
体育教育								
劇								
<b>社会開発学</b>	0	3	3	3	3	3	3	18
<b>学習法</b>	4	0	0	0	0	0	0	4
リーディング、ライティング、板書法								
コンピューターリテラシー	(2)							(2)
司書学								
<b>教育実習</b>	-	-	-	-	T.P*	-	T.P**.	
<b>総計</b>	24	24	24	24	24	24	24	168

出典: NTTC 2000 Calendar

注: \* Teaching Practice すなわち教育実習は 10 週間 \*\* 教育実習は 5 週間

入学資格; COSO および 4 科目の履修単位と 1 科目の合格資格 就学期間; 3 年半

初等教育教員再教育ディプロマコース

D.P.E. 科目別授業時間数/週

科目名	1年次		2年次		3年次		計 時間/週
	1	2	1	2	1	2	
数学	3	3	3	0		0	9
セゾト語	3	3	3	0		0	9
英語	3	3	3	0	教	0	9
開発学	3	3	3	0		0	9
科学	3	3	3	0		0	9
教育専門科目	3	3	3	0		3	12
専門選択科目 A*	6	6	4	4		5	25
英語					育		
数学							
開発学							
専門選択科目 B*	6	6	4	4		5	25
セゾト語							
科学					実		
学校運営	0	0	6	9		3	18
統計	0	0	4	0		0	4
H1 + PE	0	0	0	3		0	3
宗教教育	0	0	0	3		0	3
音楽	0	0	0	3	習	0	3
美術・工芸	0	0	0	3		0	3
自主研究	0	0	0	0		5	5
			(4)**	(4)**			(9)
技術教育	0	0	0	0		3	3
農業科	0	0	0	0		3	3
家庭科	0	0	0	0		3	3
コンピュータースキル (学習法)	(2)						2
総計	30 (32)	30	30/ 36**	33		30	153(155)/ 159(161)

出典: NTTC 2000 Calendar

注: \*専門選択科目からは、A , Bそれぞれ 1科目ずつ計2科目選択する

\*\* 該当科目を専門とする者は、同科目は履修科目から免除される

入学資格; 以下のコースにおける、2年次修了以上であること

(i) PTC (ii) APTC (iii) LIET VI (校長・教頭プログラム)

(iv) さらに2年以上の教員の職歴

就学期間; 3年

(2) 中等教育教員養成プログラム

中等教育教員養成資格コース

S.T.C 科目別授業時間数/週

科目名	1年次		2年次		3年次		計 時間/週
	1	2	1	2	1	2	
セソト語	3	3	3		3	3	15
英語	3	3	3		3	3	15
教育専門科目	3	3	3	教	3	3	15
専門選択科目 A	7.5	7.5	7.5		7.5	7.5	37.5
英語							
数学							
農業科				育			
宗教学							
簿記学							
地理学							
専門選択科目 B	7.5	7.5	7.5		7.5	7.5	37.5
セソト語							
科学				実			
家庭科							
開発学							
商業学							
補助科目	3	3	0		3	3	12
コンピュータステイ				習			
農業科							
教育実習準備	0	0	3		0	0	3
総計	27	27	27	-	27	27	135

出典: NTT 2000 Calendar

注: \*教育実習は 10 週間

入学資格; COSO と 4 科目以上の履修単位

就学期間; 3 年 (教育実習を含む)

教育実習は第 2 年の全 2 学期に実施



中等技術教員養成ディプロマコース

D.T.E. 科目別授業時間数/週

科目名	1年次		2年次		3年次		計 時間/週
	1	2	1	2	1	2	
<b>専門科目</b>							
資材学	3	3	3		2	2	13
木工テクノロジー	6	6	6		6	6	30
金属テクノロジー	6	6	6	教	6	6	30
グラフィック・コミュニケーション	6	6	6		5	5	28
最終学年自主研究							
<b>教育学</b>							
教育専門科目	3	3	3		2	2	13
教育実習準備	0	0	4*		0	0	4
教育法	0	3	3*	育	3	3	12
<b>数学/科学</b>							
数学	2	2	2		2	2	10
エンジニアリング	0	0	2		2	2	6
化学	2	0	0		0	0	2
電気・電子学	0	2	0		0	0	2
				実			
<b>コミュニケーション</b>							
セゾト語	2	2	2		0	0	6
英語	2	2	2		0	0	6
<b>救急法</b>							
保健・安全	1	1	0	習	0	0	2
<b>コンピュータースタディー (学習法)</b>	(2)	0	0		0	0	2
<b>総計</b>	<b>36 (38)</b>	<b>36</b>	<b>39</b>		<b>28</b>	<b>28</b>	<b>167 (169)</b>

出典: NTTC 2000 Calendar

注:入学資格; COSO および4科目の履修単位と、以下のうち一つ:

(i) JC もしくは COSO での技術科目の合格、または認可された技術校で授与される関連  
工芸科目の資格 ( certificate )

(ii) STTC の 2 年次か同等以上

(iii) 上記の 4 科目履修単位がない場合には、数学科と科学科の COSO(7、8 年生)合格  
就学期間; 3 年 ( 教育実習含む )

教育実習; 2 年次の全 2 学期

\* 教育実習と教育法は週の同時間に実施される 教育実習準備クラスを受講しない場合は  
教育法を受講する

## 1) Science

## DEP pre-service

Components/ Topics	Concepts
<b>Biology</b>	1. Definition 2. Life process 3. Cell as a basic unit of life 4. Properties and role of enzyme 5. Classification of living organisms <b>6. Practicals for #5</b> 7. Interdependence, relationships and human impact on ecosystems 8. Autotrophic and heterotrophic nutrition 9. Transport in plants and animals 10. Practicals 11. Breathing mechanisms in animals and plants 12. Aerobic and anaerobic respiration 13. Structure and function of excretory organs in mammals 14. Homeostatic control of temperature, pH, sugar and water <b>15. Practicals for #14</b> 16. Sexual and asexual reproduction in animals and plants 17. Inheritance, variation and selection <b>18. Practicals for #17</b> 19. Nervous and endocrine system 20. Tactic, nastic, and tropic responses in plants
<b>Chemistry</b>	1. Introduction to Chemistry 2. Matter, Elements, and Compounds 3. The Periodic Table 4. Laboratory experiment 5. Principles of Chemical Bonding 6. The Redox reactions 7. Environment as a complex system with special emphasis on air and water <b>8. Practicals for #7</b> 9. The Structure, properties and use of Acids, Bases and Salts 10. The principles of electrolysis and its Applications <b>11. Practicals for #10</b> 12. Introduction to Organic Chemistry 13. Functional groups, Homologous series, Type of organic reaction
<b>Physics</b>	1. Measurement 2. Forces 3. Work, energy, power <b>4. Practicals for #3</b> 5. Balance 6. Stability 7. Simple Machines 8. Laboratory experiment 9. Thermal Physics: Expansion 10. Measurement of temperature 11. Transfer of thermal energy 12. Static electricity 13. Current electricity 14. Magnetism 15. Applications
<b>Methodology</b>	1. History 2. Dimension of Science 3. Teaching science: various approaches 4. Methods 5. Resources 6. Planning 7. Assessment 8. Methods of teaching Science

	<ul style="list-style-type: none"> <li>9.Pupil centered Methods versus teacher centered methods</li> <li>10.Application to selected topics</li> <li>11.Curriculum Studies: curriculum analyses</li> <li>12.Curriculum Interpretation</li> <li>13.Teaching of selected topics</li> <li>14.Reflection on teaching practice</li> <li>15.Problems encountered</li> <li>16. Practicability of methods</li> <li>17.Any other issues raised</li> <li>18.Classroom organization</li> <li>19.Contemporary issues</li> <li>20.Concept formation</li> </ul>
--	--

### DPE in-service

Components/ Topics	Concepts
<b>General Science</b>	<ul style="list-style-type: none"> <li>1.Difinition of Science</li> <li>2.Life process</li> <li>3.Ecology</li> <li>4.Methods of Teaching Science</li> <li>5.Electricity and Magnetism</li> <li>6.Child development, Learning and Concept Formation</li> <li>7.Common Substances</li> <li>8.Curriculum Design</li> <li>9.Evaluation</li> <li>10.Heat and Light</li> <li>11.Simple Machines</li> <li>12.Teaching Aids</li> </ul>
<b>Biology</b>	<ul style="list-style-type: none"> <li>1.Cell structure and Organization</li> <li>2.Modification of cell structure for specific function</li> <li>3.Diffusion and Osmosis</li> <li>4.Enzymes</li> <li>5.Digestion</li> <li>6.Transport in human: Circulatory system</li> <li>7.Respiration</li> <li>8.Excretion</li> <li>9.Photosynthesis</li> <li>10.Transport in flowering plants</li> <li>11.Homeostasis</li> <li>12.Support, Movement and Locomotion in Animals</li> <li>13.Co-ordination in human</li> <li>14.Co-ordination on plants</li> <li>15.Reproduction</li> <li>16.Inheritance</li> <li>17.Diversity of Organisms</li> <li>18.Relationships of organisms with one another and with the environment</li> </ul>
<b>Chemistry</b>	<ul style="list-style-type: none"> <li>1.Difinition of Chemistry</li> <li>2.Atoms, elements and compounds</li> <li>3.Pure substances and mixtures</li> <li>4.Periodic table and periodicity of elements</li> <li>5.Bonding</li> <li>6.Chemical equations</li> <li>7.Stoichiometry and the mole concept</li> <li>8.Non-metals</li> <li>9.Metals</li> <li>10.Acids, bases and salts</li> <li>11.Electrochemistry</li> <li>12.Organic chemistry</li> </ul>
<b>Physics</b>	<ul style="list-style-type: none"> <li>1.Mearsurement</li> <li>2.Matter</li> <li>3.Termal Physics</li> <li>4.Transfer of Thermal energy</li> <li>5.Energy</li> <li>6.Forces</li> <li>7.Machines</li> </ul>

	8.Motion 9.Balance and stability 11.Electricity 12.Magnetism 13.Waves and Light
<b>Methodology</b>	1.Difinition of Science 2.Approaches to Teaching Science 3.Child Development 4.Curriculum Design 5.Assessment and Evaluation 6.Audio-Visual aids

### STC pre-service

<b>Components/ Topics</b>	<b>Concepts</b>
<b>Biology</b>	1.Life process – Definition of Biology, Characteristics of living things 2.Cell structure and function – Plant and animal cells Unicellular organism 3.Classification of living things – Characteristics of the classification system Species e.g. human Major kingdoms of living things 4.Ecology and evolution – Ecosystems Theory of evolution Course of evolution 5.Nutrition – Autotrophic Heterotrophic 6.Rspiration – Breathing Cellular 7.Excretion – The excretory system of plants and animals 8.Transport in living things – The circulatory system 9.Senses and coordination – Sense organs Nervous system 10.Support and movement – The skeletal system The muscular system Turgor in plants 11.Reproduction – Cell division Asexual reproduction Sexual reproduction Heredity 12. Health and society Diseases Self inflicated problems
<b>Chemistry</b>	1.Theory of atomic structure and the periodic table of the elements - Bohr’s theory of an atom Scroedinger’s orbital theory Elements Periodic table 2.Chemical bonds and valencies – Octet rule Types of bonds Valencies 3.Chemical reactions and equations – Types of reactions Exothermic and endothermic reactions Law of multiple proportions

<p style="text-align: center;"><b>Chemistry</b></p>	<p>Law of conservation of mass Catalytic reactions Balancing of equations</p> <p>4. Chemical and physical properties of common metals – Extraction of metals from ores and minerals Chemical properties Physical properties</p> <p>5. Dispersion systems and methods of separation – Solutions and suspensions Concentration of a solution Separation of mixtures</p> <p>6. Redox reactions - Oxidation and reduction Oxidation numbers</p> <p>7. Chemistry of the atmosphere and common gases - Composition of the air Chemical properties and uses of oxygen, nitrogen, hydrogen, carbon dioxide</p> <p>8. Acids bases and Salts – Common inorganic and organic acids Strength of an acid Bronsted definition Bases and their properties Neutralisation</p> <p>9. Energy resources and nuclear energy – Concept of chemical energy Energy resources Radioactivity</p> <p>10. Basic Organic chemistry – Characteristics of organic compounds Homologous series, radicals and functional groups Structural formulas and nomenclature Relevant organic compounds</p> <p>11. The earth and introduction of basic space science – Stars and the solar system Structure and composition of the Earth Soil</p> <p>12. Electrochemistry I – Standard electrode potential Daniel cell Electrolysis Application of electrolysis</p> <p>13. Electrochemistry II- Application of electrolysis Energy resources and nuclear energy</p> <p>14. Organic Chemistry – Division inorganic – inorganic chemistry Hydrocarbons Functional groups (alcohol, aldehydes, acids) Relevant organic compounds</p>
<p style="text-align: center;"><b>Physics</b></p>	<p>1. Measurement – SI system Length, area and volume Time, Mass, Temperature Force, Density, Errors Principle of Archimedes, law of flotation</p> <p>2. Energy -Types of energy: mechanical energy (PE and KE), electrical, chemical, light, sound heat and atomic Energy changes, The world energy crisis Work, power and energy, Simple machines</p> <p>3. States of matter – Particulate theory of matter; evidence The kinetic theory, Expansion of solids, liquids and gases Changes of state Pressure The ideal gas laws</p> <p>4. Forces and Motion – The concept of a force Weight and its measurement, Friction Centre of gravity and the moment of a force Force and motion Measuring velocity</p>

	<p>Acceleration  Newton's laws of motion, Graphs of motion  Equations of motion,  Force, mass and acceleration  Momentum and its conservation  5.Heat - Heat transfer (conduction etc)  Measuring heat energy, Specific latent heat</p> <p>6.Electricity &amp; Magnetism One –  Magnets  Electrostatics with the concept of the electric field  Simple electric circuit and its components  (cells, bulbs, switches, resistors, rheostats, ammeters and voltmeters)  Measuring voltage and current  Series and parallel circuits</p> <p>7.Waves, Light and Sound –  Characteristics of wave motion  Differences between transverse and longitudinal waves  Frequency, wavelength and velocity; their relationship  Reflection and refraction of waves  Diffraction and interference of wave  Rectilinear motion of light  Reflection of light; plane mirrors  Refraction of light; Snell's law  Lenses, Ray diagrams and the lens formula  Optical instruments  Defects of vision and correction by lenses  Colour and the spectrum  Wavelength, frequency and velocity of light  The electromagnetic spectrum  <b>(Visit to LTC installation at Lancer's Gap)</b>  The nature of sound, Transmission of sound  Loudness and pitch of sound music</p> <p>8.Electricity &amp; Magnetism Two –  Electrostatics, Charge, current and voltage  Variation of resistance of wire with length and thickness  OHM's law, Resistors in series and parallel  Internal resistance of a cell  Electrical safety, Electrical energy and power  Direct current (DC) and alternating current(AC)  Theory of magnetism  Magnetic effects of an electric current  Electromagnetic induction, Transformers  Transmission of electricity  <b>(Visit to Katse to Highlands Water Scheme dam)</b>  The cathode ray oscilloscope(CRO)</p>
<p><b>Methodology</b></p>	<p>1.Science Teaching Methodology –  Why teach science?  Different approaches to teaching science  Teaching skills  Class management and lab safety  Preparing and producing written materials</p> <p>2.Curriculum studies - The lesson plan  Scheming and recording  One section from form A &amp; B on each of Biology, Chemistry and Physics</p> <p>3.Evaluation &amp; Assessment - The place of evaluation and assessment in education in Lesotho  Different modes of assessment  Objective questions  Written questions: short and long answers  Junior Certificate Science Examination  Evaluation of a demonstration lesson</p> <p>4.The Science Department –  Management of department  Ordering, storage and maintenance of equipment  Audio-Visual aids</p>

## 2) Agriculture

### DEP pre-service (included in Applied Science)

Components/ Topics	Concepts
<b>Crop Science and Production</b> (Crop management)	<ol style="list-style-type: none"> <li>1.Importance of crops</li> <li>2.Requirements for plant growth &amp; development</li> <li>3.Land preparation</li> <li>4.Maintaining crops</li> <li>5.Management of crops</li> <li>6.Soil formation, types, management &amp; conservation</li> </ol>
<b>Animal Science and Production</b> (Animal husbandry)	<ol style="list-style-type: none"> <li>1.Types of domestic Animals</li> <li>2.Importance of domestic animals</li> <li>3.Management of domestic animals</li> <li>4.Animal selection and breeding</li> <li>5.Rearing pigs, small ruminants and poultry</li> <li>6.Parts and diseases of animals</li> <li>7.Animal nutrition</li> </ol>
<b>Agriculture Teaching Methods</b> (Methodology)	<ol style="list-style-type: none"> <li>1.Methods of teaching</li> <li>2.Course content</li> <li>3.Instructional objectives</li> <li>4.Lesson plan</li> <li>5.Instructional materials</li> <li>6.Mesure and evaluate</li> </ol>
<b>School Farm Management</b> (Farm management)	<ol style="list-style-type: none"> <li>1.Economic system in food production</li> <li>2.The teacher and school farm</li> <li>3.Management practices</li> <li>4.Farm labor</li> <li>5.School farm records</li> <li>6.Land tenure</li> <li>7.Agricultural produce marketing</li> </ol>
<b>Farm Workshop</b> (Farm Mechanics)	<ol style="list-style-type: none"> <li>1.Farm tools and equipment</li> <li>2.Irrigation practices</li> <li>3.Irrigation equipment</li> <li>4.Uses of farm tools &amp; equipment</li> </ol>

### STC pre-service

Components/ Topics	Concepts
<b>Introductory Agriculture</b>	<ol style="list-style-type: none"> <li>1.Meaning of agriculture</li> <li>2.Economic importance</li> <li>3.Effects of environment on crop and animals</li> <li>4.Soil formation – texture, types, structure, fertility, soil water and soil reaction (pH)</li> <li>5.Seedbet preparation</li> <li>6.Plant propagation (sexual and asexual)</li> <li>7.Irrigation effects of weeds</li> <li>8.Pest and diseases</li> <li>9.Control of weed (cultural and chemical)</li> <li>10.Control of diseases (cultural and chemical)</li> <li>11.Soil erosion - causes and control measure</li> <li>12.Animal production</li> <li>13. Feeding – types of feed</li> <li>14.Animals' health</li> </ol>
<b>Farm Practicals</b>	<ol style="list-style-type: none"> <li>1.Growing of swish chard, peas, tomatoes and beetroot</li> <li>2.Care of garden tools and management of piggery unit, rabbitry unit and poultry unit.</li> </ol>



<p style="text-align: center;"><b>Intensive Small Stock Production</b></p>	<ol style="list-style-type: none"> <li>1.Origin</li> <li>2.Economic importance</li> <li>3.Breeds</li> <li>4.Breeding</li> <li>5.Feeding</li> <li>6.Housing</li> <li>7.Common diseases</li> <li>8.Common parasites and marketing of pigs, rabbits and poultry (layer and broilers)</li> </ol>
<p style="text-align: center;"><b>Vegetable Production</b></p>	<ol style="list-style-type: none"> <li>1.Origin</li> <li>2.Economic importance</li> <li>3.Characteristics</li> <li>4.Climatic requirements</li> <li>5.Soil requirements</li> <li>6.Seedbed preparations</li> <li>7.Varieties of vegetable</li> <li>8.Planting</li> <li>9.Manuring</li> <li>10.Weeding</li> <li>11.Common pests</li> <li>12.Common diseases</li> <li>13.Irrigation</li> <li>14.Harvesting</li> <li>15. Marketing and crop improvement</li> </ol>
<p style="text-align: center;"><b>Cattle Husbandry</b></p>	<ol style="list-style-type: none"> <li>1.Origin</li> <li>2.Economic importance</li> <li>3.Characteristics of each breed, common breeds in Lesotho</li> <li>4.Feeding</li> <li>5.Breeding management</li> <li>6.Housing parasites in Lesotho</li> <li>7.Mardeting and improvement practices</li> </ol>
<p style="text-align: center;"><b>Farm Practicals</b></p>	<ol style="list-style-type: none"> <li>1.Feeding cows and calves</li> <li>2.Cattle ration computing</li> <li>3.Milking</li> <li>4.Care of calves and at least one field trip to observe some of the practices that are not available at college</li> </ol>
<p style="text-align: center;"><b>Agricultural Teaching Methods</b></p>	<ol style="list-style-type: none"> <li>1.Review of learning cycle and factors that promote learning</li> <li>2.Teaching methods – demonstration, problem based learning, problem solving method, practicals and discussion</li> <li>3.Preparation and selection of teaching aids</li> <li>4.Lesson planning –theory &amp; practical</li> <li>5.Macro teaching</li> </ol>
<p style="text-align: center;"><b>Fodder Production and Range Management</b></p>	<ol style="list-style-type: none"> <li>1.Fodder crops- origin, botanical characteristics, economic importance, soil requirements, seedbed preparation, fertilizer application, varieties, planting, weed control, pest control, disease control, harvesting, processing marketing</li> <li>2.Range management- definition, terms, natural principals grazing systems effects of noxious plants ant their control measures in Lesotho signs of retrogression signs of improvement practices and economic importance</li> </ol>
<p style="text-align: center;"><b>Farm Practicals</b></p>	<ol style="list-style-type: none"> <li>1.Planting and looking after wheat crop, broadbeans, lucerne, barley, oats, eragrostic, and triticale</li> <li>2.At least one field trip to study the tools used in large scale crop production practices e.g. ploughs, harrows, mowers, balers etc.</li> </ol>

<p style="text-align: center;"><b>Agricultural Economics</b></p>	<ol style="list-style-type: none"> <li>1. Marketing- definition; nature of agricultural products, processing of agricultural products, type of markets and price determination theory</li> <li>2. Farm management- definition, factors of production, costs (fixed, variable and opportunity) and budgeting</li> <li>3. Farm accounts – types of records (physical and financial), cash analysis, record book, profit and loss A/c and balance sheet</li> <li>4. Agricultural co-operatives – definition importance and principle</li> </ol>
<p style="text-align: center;"><b>Deciduous Fruit and Forestry Production</b></p>	<ol style="list-style-type: none"> <li>1. Origin</li> <li>2. Economic importance</li> <li>3. Botanical characteristics</li> <li>4. Climatic requirements</li> <li>5. Site selection</li> <li>6. Orchard layout</li> <li>7. Seedbed preparation</li> <li>8. Varieties</li> <li>9. Nurserybed management</li> <li>10. Transplanting</li> <li>11. Fertilizer application</li> <li>12. Weed control</li> <li>13. Common diseases</li> <li>14. Common pests</li> <li>15. Irrigation</li> <li>16. Other managerial practices</li> <li>17. Harvesting</li> <li>18. Marketing of these fruits and crop improvement</li> <li>19. Forestry</li> </ol>
<p style="text-align: center;"><b>Field Crop Production</b></p>	<ol style="list-style-type: none"> <li>1. Origin</li> <li>2. Botanical characteristics</li> <li>3. Climatic requirements</li> <li>4. Soil requirements</li> <li>5. Seedbed preparation</li> <li>6. Manuring</li> <li>7. Varieties</li> <li>8. Planting</li> <li>9. Weed control</li> <li>10. Pest control</li> <li>11. Disease control</li> <li>12. Harvesting</li> <li>13. Marketing of these fruits and crop improvement</li> </ol>
<p style="text-align: center;"><b>Animal Production</b></p>	<ol style="list-style-type: none"> <li>1. Origin</li> <li>2. Economic importance</li> <li>3. Types and their characteristics</li> <li>4. Common breeds in Lesotho and their characteristics</li> <li>5. Breeding</li> <li>6. Feeding</li> <li>7. Housing</li> <li>8. Handling and constraining</li> <li>9. Diseases</li> <li>10. Parasites and predators</li> <li>11. Special management practices</li> <li>12. Marketing (products &amp; animals) of goats and fish</li> </ol>

<p style="text-align: center;"><b>Soil and Soil Conservation</b></p>	<p>1. Soil - definition, formation, profile, texture, types, fertility, structure, drainage, manuring (organic and inorganic), soil reaction, liming</p> <p>2. Soil erosion – definition, agents, factors that encourages, types, control measures (vegetation, structures, and other conservation measures), economic importance</p>
<p style="text-align: center;"><b>Farm Instructions</b></p>	<p>1. Growing: swish chard, onion, cabbage and legumes (peas and broadbeans)</p> <p>2. Livestock duties: feeding, housing, disease control, breeding (where applicable), milking (where applicable) calf rearing</p> <p>3. Educational trips</p>
<p style="text-align: center;"><b>Ancillary for Social &amp; Development Studies</b></p>	<p>1. Nature of soil- its production and potential and dangers of erosion</p> <p>2. Basic vegetables production skills</p> <p>3. Basic livestock management skills</p> <p>4. Basic fruit production and management skills</p>

### 3) Home Economics

#### DEP pre-service (included in Applied Science)

Components/ Topics	Concepts
<b>Food and Nutrition</b>	<ol style="list-style-type: none"> <li>1.Kitchen plan</li> <li>2.Kitchen/household equipment</li> <li>3.Kitchen hygiene and safety</li> <li>4.Reasons/methods of cooking</li> <li>5.Methods of heat transfer</li> <li>6.Dry and moist heat methods of cooking</li> <li>7.Methods of measuring and weighing</li> <li>8.Meal planning and food presentation</li> <li>9.Food preservation</li> </ol>
<b>Clothing and Textiles</b>	<ol style="list-style-type: none"> <li>1.Classification of fibres</li> <li>2.Properties of fibres</li> <li>3.Fabric construction</li> <li>4.Application of colour and finishes</li> <li>5.Care labels</li> <li>6.Needlework equipment, choice, care and use</li> <li>7.Commercial patterns</li> <li>8.Basic pattern drafting</li> <li>9.Needlework processes</li> <li>10.Knitting and crocheting</li> </ol>
<b>Home Management</b>	<ol style="list-style-type: none"> <li>1.Setting goals and decision making</li> <li>2.Economy of resources</li> <li>3.Rights and responsibilities of a consumer</li> <li>4.Methods of teaching Home Economics</li> <li>5.Practicals lesson plan</li> </ol>

#### For Year 1 of STC pre-service

Components/ Topics	Concepts
<b>Food and Nutrition 1</b>	<ol style="list-style-type: none"> <li>1.Nutrition and nutritional concepts</li> <li>2.The relationship of diet and health</li> <li>3.Food storage and preservation</li> </ol> Assignment – collect information from different sources on issues showing relationship between diet and health given after topic 3 : practice methods of preserving
<b>Nutrients</b>	<ol style="list-style-type: none"> <li>1.Definition</li> <li>2.Functions</li> <li>3.Sources</li> <li>4.Deficiency results</li> </ol> Assignment - identify, list, survey
<b>Textile Studies Clothing &amp; Textiles</b>	<ol style="list-style-type: none"> <li>1.Needlework equipment i.e. small equipment, large equipment, asses sources</li> </ol> Assignment – identify, sort, describe, draw
<b>Fibres and Fabrics</b>	<ol style="list-style-type: none"> <li>1.Definition</li> <li>2.Classification</li> <li>3.Identification</li> </ol> Assignment – identify fibres through burning tests another methods classify according to type characteristics
<b>Knitting and Crocheting</b>	<ol style="list-style-type: none"> <li>1.From fibres to yarns treatment of fibres,fabric making and the construction methods, fabric treatment</li> </ol> Assignment – to make doyles and knit baby’s article using chart of different colours practice different methods of fabric construction Excursion to fabric-making firm – Bloemfontein
<b>Fabric making continued</b>	Assignment – collect sample of fabrics identify differences between fabrics by their (a) fibre content (b) construction methods

<b>Colour and Colour Schemes</b>	<ul style="list-style-type: none"> <li>1.The colour wheel</li> <li>2.Primary colours</li> <li>3.How secondary colours are made</li> <li>4.Intermediate colours</li> <li>5.Transfer of colour onto fabrics</li> <li>6.Methods of transferring colour onto fabrics</li> </ul> <p>Assignment – make tie and dye or printing on fabrics, mix dyes of primary colours to produce secondary colours or intermediate colours</p>
<b>Garment Construction</b>	<ul style="list-style-type: none"> <li>1.Sewing stiches</li> <li>2.Decorative stitches</li> <li>3.Seams: french, run &amp; fell, open and overlaid,</li> <li>4.Disposal of fullness: <ul style="list-style-type: none"> <li>(a) gathers</li> <li>(b) pleats</li> <li>(c) darts</li> </ul> </li> </ul> <p>Assignment – make a folder of stitches, seams and openings</p>
<b>Openings</b>	<ul style="list-style-type: none"> <li>1.Faced</li> <li>2.Bound</li> <li>3.Continuous wrap</li> </ul> <p>Assignment - practice and mount in folder</p>
<b>Commercial Pattern</b>	<ul style="list-style-type: none"> <li>1.Pattern making - symbols and their meaning</li> <li>2.Transfer of pattern – markings onto fabric <ul style="list-style-type: none"> <li>methods of transferring them</li> </ul> </li> <li>3.Care labels and symbols</li> </ul> <p>Assignment – practice methods of transferring the pattern symbols make child top/ dress identify care labeling and their meaning</p>
<b>Food and Nutrition 2</b>	<ul style="list-style-type: none"> <li>1.Meal planning</li> <li>2.The three food groups</li> <li>3.The food pyramid</li> <li>4.The balanced diet</li> <li>5.Factors in planning meals</li> <li>6.Food hygiene</li> </ul>
<b>Practical Exam in cookery</b>	Revision

### For Year 3 of STC pre-service

<b>Components/ Topics</b>	<b>Concepts</b>
<b>Experiences from Teaching Practice</b>	<ul style="list-style-type: none"> <li>1.Presentations (oral)</li> <li>2.Lecture</li> <li>3.Demonstration</li> <li>4.Practicals</li> </ul> <p>Assignment – make oral presentation</p>
<b>Recycling clothes</b>	<ul style="list-style-type: none"> <li>1.Mending techniques</li> <li>2.Patchwork (a) print patch (b) calico patch</li> </ul> <p>Assignment – make samples and mount them</p>
<b>Darning and Dyeing</b>	<ul style="list-style-type: none"> <li>1.Hedgetear darn</li> <li>2.Darling a thin place</li> <li>3.Dyeing</li> </ul> <p>Assignment – make tie and dye</p>
<b>Style alternation Thrift garment and Commercial pattern</b>	<ul style="list-style-type: none"> <li>1.Thrift garment</li> <li>2.Commercial patterns and their symbols</li> </ul> <p>Assignment – make tie and dye make a thrift garment make a blouse with colar and appropriate fasteners</p>
<b>Food and Nutrition</b>	<ul style="list-style-type: none"> <li>1.Nutrients (a) micronutrients (b) macronutrients</li> <li>2.Their function in the foody</li> </ul>
<b>Meal planning and Food service</b>	<ul style="list-style-type: none"> <li>1.Designing meal for breakfast, lunch and dinner</li> <li>2.Food service – table setting</li> </ul> <p>Assignment – plan, prepare and serve meals for people with different needs, special diet</p>
<b>Child care and development</b>	<ul style="list-style-type: none"> <li>1.The importance of child spacing - decision making</li> </ul> <p>Assignment - questioning</p>
<b>The pre-natal care</b>	<ul style="list-style-type: none"> <li>1.Research through visits to clinics</li> </ul>

	Assignment – write reports and tests
<b>Family &amp; Resources Management</b>	1.Resources management Assignment – collect pictures and make folder files for interiors of different rooms
<b>Revision</b>	Revision

### Diploma in Home Economics

<b>Components/ Topics</b>	<b>Concepts</b>
<b>Food and Nutrition</b>	<ol style="list-style-type: none"> <li>1.Definition of nutrition terms</li> <li>2.List the major nutrients</li> <li>3.Name the three food groups</li> <li>4.Give examples of foods from each of the three food groups</li> <li>5.Explain the functions of food in growth and maintenance of the body(relationship between diet and health)</li> </ol>
<b>Food Preparation</b>	<ol style="list-style-type: none"> <li>1.Reason for cooking food</li> <li>2.Reasons for not cooking food</li> <li>3.Importance of not overcooking certain foods(e.g. vegetables)</li> <li>4.Improtance of adequately cooking some foods (e.g. pork)</li> <li>5.Difinition and demonstration of the methods of food preparation (e.g. boiling, steaming, shallow frying, baking and roasting)</li> <li>6.Compare the advantage and disadvantage of different methods of cooking of various foods</li> <li>7.Given appropriate criteria, evaluate food products</li> <li>8.Correct methods of measuring/weighing liquid and dry ingredient</li> <li>9.Proper use and care of kitchen equipment (i.e. knives, cutting board, common types of stoves, peelers, grates )</li> </ol>
<b>Meal Planning</b>	<ol style="list-style-type: none"> <li>1.Difine a balanced diet</li> <li>2.Plan balanced menus for one day</li> <li>3.List and explain the factors to consider in meal planning (e.g. cost, three food groups, preparation time, family size and preferences, seasonal availability, variety of shapes, colours, textures, temperatures, flavours)</li> </ol>
<b>Food Service</b>	<ol style="list-style-type: none"> <li>1.List good manners</li> <li>2.Discuss appropriate ways of serving large groups (e.g.school lunch)</li> <li>3.Given a food service situation (e.g. meal, tea), demonstrate the appropriate table setting.</li> </ol>
<b>Food Hygiene, Preservation and Storage</b>	<ol style="list-style-type: none"> <li>1.Reasons for preserving food</li> <li>2.Identify the signs of food spoilage</li> <li>3.Classify the causes of food spoilage and explain how to retard spoilage.</li> <li>4.List the most common methods of food preservation (i.e. drying, boiling, pressure canning, salting and refrigeration)</li> <li>5.Describe the proper procedures to follow in each method of food preservation</li> <li>6.Give the advantages and disadvantages of each food preservation method</li> <li>7.List factor to consider when storing food</li> <li>8.Describe the characteristics of good storage facilities for various foods</li> <li>9.Consequences of poor or inadequate food storage facilities</li> </ol>
<b>Malnutrition</b>	<ol style="list-style-type: none"> <li>1.Definition of malnutrition</li> <li>2.Name nutritional disorders common to Lesotho (i.e. marasmus, pellegra, kwashiorkor, obesity, goiter, anemia)</li> <li>3.Causes and effects of malnutrition</li> <li>4.Identify the symptoms of nutritional disorders common to Lesotho</li> <li>5.Prevention and treatment of nutritional disorders</li> <li>6.Compare the characteristics of well-fed and malnourished children</li> </ol>
<b>Care of the Body and Personal Health Habits</b>	<ol style="list-style-type: none"> <li>1.Importance of personal cleanliness (regular bathing, clean hair,etc)</li> <li>2.Proper way of cleaning teeth, using a tooth brush or sehlatsoameno</li> <li>3.Suggest ways in which personal cleanliness can be practiced and reinforced at school</li> <li>4.Ways of teaching feminine hygiene</li> <li>5.List good health habits or the components of a healthy life style(i.e. physical exercise, adequate sleep, regular meals, balanced diet, etc.)</li> <li>6.Discuss factors which contribute to mental and emotional well-being</li> </ol>

<b>Grooming</b>	<ol style="list-style-type: none"> <li>1.Characteristics of a well-groomed person</li> <li>2.Importance of grooming</li> <li>3.Name commercial grooming aids (e.g.deodrant)</li> <li>4.Care of feet</li> <li>5.Contribution of posture and poise to overall appearance</li> </ol>
<b>Substance Abuse</b>	<ol style="list-style-type: none"> <li>1.Identify the substances most common abused in Lesotho (i.e. alcohol, tobacco, glue, dagga, benzine )</li> <li>2.Discussion of reasons for substance abuse</li> <li>3.Effects and consequences of abuse of each substance</li> <li>4.Identify local sources for substance abuse education and rehabilitation</li> </ol>
<b>Childhood Diseases, illnesses, and immunizations</b>	<ol style="list-style-type: none"> <li>1.List the most common illnesses and diseases (e.g.whooping cough, measles, diptheria, tetanus, coic, colds, rashes, constipation )</li> <li>2.Symptoms, proper treatment and ways of prevention</li> <li>3.Name the illnesses against which immunizations are available</li> <li>4.Outline the proper sequence and timing of these immunizations</li> <li>5.Causes and consequences of dehydration</li> <li>6.Identify the symptoms of dehydration</li> <li>7.Prepare the ORT (oral dehydration therapy) mixture</li> <li>8.Demonstrate correct methods for sterilizing feeding utensils and explain why these methods are important (e.g. baby, sick person)</li> </ol>
<b>Environmental Sanitation</b>	<ol style="list-style-type: none"> <li>1.Importance of a clean environent</li> <li>2.Demonstrate cleanliness in the classroom environment</li> <li>3.Demonstrate cleanliness in the school kitchen</li> <li>4.Explain what is included in proper sanitation (e.g. pest control, waste disposal, safe water, disease control)</li> <li>5.Name common household pests and rodents(e.g. flies, roach, feas, bedbugs, mice, rats)</li> </ol>
<b>Demonstrate a variety of appropriate teaching methods</b>	<ol style="list-style-type: none"> <li>1.List and define methods commonly used in teaching health/nutrition at the primary level (e.g. step-by-step, child-to-child, discussion, demonstration, role piay)</li> <li>2.Describe the advantages and disadvantages of the various methods</li> <li>3.Observe at least one twenty minute demonstration lesson in health/nutrition</li> </ol>
<b>Promote community involvement in Health and Nutrition</b>	<ol style="list-style-type: none"> <li>1.Discuss teacher identification of pupils with suspected nutrition and health problems</li> <li>2.Suggest ways of promotion community support and involvement in Health and Nutrition Education</li> <li>3.Develop a plan for school/ community activity in some area of health and nutrition and a clean-up campaign.</li> </ol>
<b>Manage and utilize subject resources</b>	<ol style="list-style-type: none"> <li>1.List health resources available in Lesotho and tell how to contact them (e.g. public health nurses, hospitals, flying doctors, village health workers, health inspectors, ambulances)</li> <li>2.Tell what services are available in local clinics and how to use these services</li> <li>3.List nutrition resources available in Lesotho and how to contact them (e.g. MOA nutrition assistants, FNCO, women's organizations)</li> <li>4.Suggest ways of consulting and cooperating with local health and nutrition resource persons</li> </ol>
<b>Supervise School Feeding</b>	<ol style="list-style-type: none"> <li>1. Describe the minimum facilities and equipment required for preparation and storage of foods for the school feeding progrmme</li> <li>2.Given a sample case, suggest ways of providing security for food commodities and equipment.</li> <li>3.SFU forms and sample figures, correctly complete orders and records</li> <li>4.List factors to consider in obtaining volunteers or hiring cooks for the school feeding programme e.g. Standard 6 healthy, clean , suitable age)</li> <li>5. Identify ways of utilizing produce from the school garden in the school-feeding menu.</li> <li>6.Ways in which the school feeding programme can be used as a resource in teaching health/nutrition</li> <li>7.Develop a lesson plan using the resources of the school feeding programme</li> </ol>
<b>Teaching Strategies</b>	<ol style="list-style-type: none"> <li>1.Several Teaching Methods; lecture, demonstration, laboratory, case study, role play, field trip, and guest speaker</li> </ol>



#### 4) Art & Crafts

##### DEP pre-service (included in Expressive Arts)

Components/ Topics	Concepts
<b>Art Education</b> (History/Foundation)	1. History of Art in other countries 2. History of Art in Lesotho 3. Why teach art in schools 4. Definition of terms 5. Integrating art with other subjects
<b>Forms of Art</b>	1. Drawing - favorite object and figures in motion 2. Painting – blow/straw painting and blot painting 3. Print making – string prints and junk prints 4. Cooage – paper collage and picture collage 5. Puppetry – stick puppets and socks puppets 6. Modelling – bowls and mugs 7. Contraction – kites, toys 8. Crafts – brooms and mat making and fabric art
<b>Art Education</b> (Advance)	1. Suitable activities 2. Methodology/schemes planning 3. Media- materials and tools 4. Pupil's assessment 5. Educational trips/ motion of art 6. Who should teach art? 7. Colour theory

##### DPE in-service

Components/ Topics	Concepts
<b>What is Art?</b>	1. Art Disciplinary 2. Art branches and principles
<b>Basic Concepts of Art and Crafts Instruction</b>	1. Discussion of stages of creative growth in Child Development
<b>Developing Practical Skills</b>	1. Methods of Drawing using pencils, pens, etc. <b>2. Practicals</b> – trainee are to come with pencils, back pens, etc. 3. Trainees are to work on their own drawings in a chosen Media, and mount them appropriately.
<b>Safety in the art-classroom</b>	1. Hand outs on Positive and Negative suggestions in an Art class to be handed out.
<b>Integration of Art</b> (with other subjects)	<b>1. Practical</b> 2. Assignment on integration through creation of an A4 size teaching Aid in any chosen subject. 3. Ideas of integration to be discussed by the trainees. 4. Art assignment to be Mounted and handed in 3 weeks.
<b>Teaching Methodologies</b>	1. Schemes 2. Lesson plans
<b>Display area and bulletin boards</b>	1. Demonstrations of proper mounting of pupils art works 2. Effective use of display area and bulletin boards
<b>Developing of Crafts skills</b>	1. Materials for traditional Basotho 2. Hand crafts to be discussed 3. Discussion of the advantages of teaching local crafts in schools 4. Broom, and mat making in group work.
<b>Practical application on colour</b>	1. Group work 2. Creation of colour – Charts.
<b>Contents of Primary Syllabus</b>	1. Discussion
<b>Continuation of unfinished works</b>	<b>1. Practicals</b>
<b>Assessment and Evaluation</b>	1. Discussion
<b>Revision</b>	Revision

Note: This course outline is only for Semester 3, Year 2 of DPE

## 5) Computer Studies

### For Semester 1, Year 1 of DEP pre-service (computer literacy in Study Skills)

Components/ Topics	Concepts
Basic computer skills	1. Discription of computer terms 2. Introduction to word processing including <b>Practice</b> 3. Using the file management system- <b>Practice</b> 4. Using printers- <b>Practice</b>

### For Year 1 of DPE in-service, STC pre-service, DTE in-service

Components/ Topics	Concepts
Introduction to word-processing and the NTTC network	1. Difinition of Computer – advantage of computers, uses of computers 2. Computer Hardware & Software 3. Basic computer terminology 4. The computer system <b>5. Practical</b> – Introduction to Windows 3 x environment. 6. The startup & shutdown procedures on the NTTC network. <b>7. Practical</b> – The mouse & windows tutorials <b>8. Practical</b> – The windows tutorial, starting & closing applications in windows 9. Introduction to word-processing using Word Perfect <b>10. Practical</b> - Word-processing features: knowing the keyboard operations <b>11. Practical</b> – Word-processing features: creating & editing a document. 12. Classification of Computers <b>13. Practical</b> – Word-processing features: block operations 14. Saving a document in Word Perfect <b>15. Practical</b> - Opening a document in Word Perfect 16. Word-processing features: spell check <b>17. Practical</b> - Word-processing features: centering, spacing, emphasis, font. <b>18. Practical</b> - Word-processing features: justification, margins, indent. <b>19. Practical</b> - Printing a document, using the print preview, reserch by using CD ROM

### For Semester 1, Year 3 of STC pre-service

Components/ Topics	Concepts
Introduction to Computing	1. Computers Introduced- (total theory; 3 hours) What is computer? What are computers used for? Evolution of computers; types of computers in use today A microcomputer <b>Practical</b> – Keyboard familiarity (2 hours) (a) Starting up and shutting down procedures on the NTTC network (b) Introducing the Mouse and Windows Environment (c) Using the Mouse Tutorial 2. Computer Hardware (8 hours) Input Hardware: categories of input hardware (keyboard & non-keyboard) and their application in today's world e.g. terminals, scanning devices, smart cards, voic input, pointing devices. Processing Hardware: primary and secondary storage, bits and bytes, files & directories, data storage

	<p>hierarchy</p> <p>sequential, random access and indexed storage, tape and disk storage devices e.g. magnetic tape, diskettes, hard disks, optical storage</p> <p>Output Hardware: categories and types of output hardware and their uses e.g. VDHS, printers, plotters, etc.</p> <p><b>Practical</b>–Using the Windows Tutorial <b>(1 hour)</b></p> <p>3.Computer Software (4 hours)</p> <p>System Software: definition, categories, common systems software for microcomputers, multi processing, multitasking (all elementary level), introductory level to DOS commands</p> <p>Applications Software: definition, types and uses with reference to a variety of working environments including schools</p> <p><b>Practical</b> – Introduction to DOS commands (1.5 hours) Introduction to Windows 95/98</p> <p>4.Word Processing (1hour)</p> <p>Advantages of word processors Who uses word processors and why? Word processing features: fonts, margins, justification, ideating, tabs, page numbering, headers/ footers, tables, columns, etc.</p> <p><b>Practical</b> – <b>(13 hours)</b> Word Processing using Word Perfect 5.2 for Windows Evaluation of two different word processors e.g. MS Word 6.0, VS Word Perfect 5.2 File manipulation in DOS and Windows environment</p> <p>5.Computers in Society (3 hours)</p> <p>Computers in the workplace: industrial, technical and scientific uses of computers, data processing e.g. banks, hospitals, personnel, etc. Computers in communications and information systems e.g. library, e-mail, data base systems Computers in education, training, etc.</p> <p><b>Practical</b> – <b>(1.5 hours)</b> Research on some of the above topics using CD ROM</p>
--	---

## NTTCの学生数(過去実績)

## Year 1997

Teaching Year	Number of Students	Educational Courses						Total
		Dip.Ed.(Pr.)	PTC	PTC(in-ser.)	STC	Dip.P. Ed.	Dip.Tech.(Ed.)	
1st	Male		21		24	4	9	58
	Female		133		95	52	1	281
	Total	0	154	0	119	56	10	339
2nd	Male		20		35	10	8	73
	Female		114		61	40	2	217
	Total	0	134	0	96	50	10	290
3rd	Male		17		29	7	12	65
	Female		113		56	39	2	210
	Total	0	130	0	85	46	14	275
Total	Male	0	58	0	88	21	29	196
	Female	0	360	0	212	131	5	708
	Total	0	418	0	300	152	34	904

## Year 1998

Teaching Year	Number of Students	Educational Courses						Total
		Dip.Ed.(Pr.)	PTC	PTC(in-ser.)	STC	Dip.P. Ed.	Dip.Tech.(Ed.)	
1st	Male		44		40	7	15	106
	Female		148		71	53		272
	Total	0	192	0	111	60	15	378
2nd	Male		16		16	4	9	45
	Female		151		64	52	1	268
	Total	0	167	0	80	56	10	313
3rd	Male		19		57	10	8	94
	Female		103		32	40	2	177
	Total	0	122	0	89	50	10	271
Total	Male	0	79	0	113	21	32	245
	Female	0	402	0	167	145	3	717
	Total	0	481	0	280	166	35	962

## Year 1999

Teaching Year	Number of Students	Educational Courses						Total
		Dip.Ed.(Pr.)	PTC	PTC(in-ser.)	STC	Dip.P. Ed.	Dip.Tech.(Ed.)	
1st	Male	30	2		29	8	15	84
	Female	77	7		55	40		179
	Total	107	9	0	84	48	15	263
2nd	Male		38		35	8	14	95
	Female		156		76	54		286
	Total	0	194	0	111	62	14	381
3rd	Male		17		16	4	9	46
	Female		127		64	51	1	243
	Total	0	144	0	80	55	10	289
Total	Male	30	57	0	80	20	38	225
	Female	77	290	0	195	145	1	708
	Total	107	347	0	275	165	39	933

(Source: NTTC)

## 11. NTTCスタッフ数

## NTTC職員数

		執行職員	上級職員	一般職員	教授	助教授	講師	技師	合計
運営役員	学長								
	副学長	2							2
	教務主任	1							1
	副学長補佐	3							3
	小計	6	0	0	0	0	0	0	6
事務・ 管理部門	経理		2	5					7
	人事		1	2					3
	学生・教務		3	13					16
	図書館		1	2					3
	秘書		3	15					18
	食堂		3	16					19
	守衛			10					10
	運転手			5					5
	その他		3	7					10
	小計	0	16	75	0	0	0	0	91
教育部門	初等教育部				18	23	10	0	51
	中等教育部				31	17	2	5	55
	再教育部				12	10	0	0	22
	小計	0	0	0	61	50	12	5	128
合計		6	16	75	61	50	12	5	225

## NTTC教員数内訳

学科	科目	教授	助教授	講師	技師	合計
初等教育	農業	1	2	1		4
	英語	3	2	0		5
	家庭科	0	2	1		3
	科学	2	3	1		6
	セソト語	1	3	1		5
	社会開発	2	3	1		6
	数学	1	3	1		5
	音楽	1	0	0		1
	専門科目	2	4	1		7
	宗教教育	1	1	1		3
	美術・工芸	2	0	1		3
	保健体育	2	0	1		3
	小計		18	23	10	
中等教育	農業	2	1	0		3
	商業	1	2	1		4
	英語	5	1	0		6
	保健体育	1	0	0		1
	家庭科	0	2	0		2
	数学	3	2	0		5
	専門科目	4	2	0		6
	宗教教育	2	1	0		3
	科学	5	0	0		5
	セソト語	3	1	0		4
	社会開発	1	3	0		4
	技術教育	3	2	1		6
	コンピュータ	1	0	0		1
	実験方法	0	0	0	4	4
視聴覚教育				1	1	
小計		31	17	2	5	55
再教育	農業	0	2	0		2
	商業	1	1	0		2
	英語	1	3			4
	家庭科	1				1
	保健	1				1
	数学	1	1			2
	専門科目		2			2
	宗教教育	2				2
	科学	2				2
	セソト語	2	1			3
	社会開発	1				1
小計		12	10	0		22
合計		61	50	12	5	128

## 学生推定数及びクラス数(2000年～2004年)

学生数推移											
コース名	学年	2000年*1		2001年		2002年		2003年		2004年	
		学生数	クラス数	学生数*2	クラス数*3	学生数*2	クラス数*3	学生数*2	クラス数*3	学生数*2	クラス数*3
DEP pre-service 初等教育教員養成ディプロマコース		150	5	181	6	193	7	206	3	221	8
		101	3	150	5	181	6	193	7	206	7
		0	0	101	4	150	5	181	6	193	7
		0	0	0	0	101	4	181	6	181	6
PTC pre-service 初等教育教員養成コース		0	0	0	0	0	0	0	0	0	0
		18	1	0	0	0	0	0	0	0	0
		172	5	18	1	0	0	0	0	0	0
DPE in-service 初等教育教員再教育ディプロマコース		44	2	48	2	52	2	56	2	60	2
		48	2	44	2	48	2	52	2	56	2
		62	2	48	2	44	2	48	2	52	2
STC pre-service 中等教育教員養成コース		130	4	185	6	193	7	207	7	221	8
		86	3	134	5	185	6	193	7	207	7
		100	3	85	3	134	5	185	6	193	7
DTE pre-service 中等技術教育教員ディプロマコース		16	1	16	1	17	1	18	1	19	1
		16	1	15	1	16	1	17	1	18	1
		14	1	16	1	15	1	16	1	17	1
<b>総学生数</b>		957	33	1041	39	1329	49	1553	51	1644	59

注：\* 1 2000年学生数及びクラス数は現状の数値。

(Source: NTT)

\* 2 2001～2004年の学生数予測値はNTTCより入手。

\* 3 2001～2004年クラス数は、1クラス30人程度を限度として算定した数値。

コース・科目別 実験・実習室を使用する授業時間数(週当たり)2002年計画値

(単位:時間/週)

コース名	学年	クラス数	科学				農業				家庭				美術・工芸				コンピュータ					
			1学期		2学期		1学期		2学期		1学期		2学期		1学期		2学期		1学期		2学期			
			全体	実験	全体	実験	全体	実験	全体	実験	全体	実習	全体	実習	全体	実習	全体	実習	全体	実習	全体	実習		
DEP		7	必修			35.0	26.1			28.0	22.4			21.0	15.4							30.0	27.0	
		6	必修	18.0	14.8	18.0	14.4	18.0	13.2	18.0	14.4	18.0	12.6	18.0	16.2	20.0	15.0	20.0	18.0					
		5	必修	15.0	10.0	15.0	10.0	15.0	11.3	15.0	15.0	15.0	12.0			16.7	12.5							
		4	必修	12.0	9.1	12.0	8.4	12.0	3.7	6.0	6.0	12.0	9.2			13.3	11.3	13.3	11.3					
DEP計			45.0	33.9	80.0	58.9	45.0	28.3	67.0	57.8	45.0	33.8	39.0	31.6	50.0	38.8	33.3	29.3	0.0	0.0	30.0	27.0		
DPE		2	必修	6.4	4.0	6.4	1.1												3.8	3.3				
		1	選択	6.1	4.1	4.7	2.5																	
		2	必修	6.4	4.0												24.0	6.4						
		1	選択	4.0	2.6	3.9	2.3																	
		2	必修							10.0	6.3			8.0	6.7									
		1	選択			5.4	3.4																	
DPE計			22.9	14.7	15.0	5.9	0.0	0.0	10.0	6.3	0.0	0.0	8.0	6.7	0.0	0.0	24.0	6.4	3.8	3.3				
STC		1	選択	6.3	4.9	7.5	5.3	7.2	5.2	7.5	5.1	7.5	6.4	7.7	5.5				2.0	1.6				
		1	補助					3.0	2.1					3.0	4.3						7.7	5.8		
		3,2	選択	27.6	19.2		0.0	15.2	10.0			15.0	11.8						14.0	8.0				
		1	補助					3.0	1.2															
		2,1	選択	18.5	13.3	15.0	11.5	7.7	4.9	7.5	3.7	7.6	6.0	7.3	4.5				5.0	4.3	5.0	4.1		
		1	補助				1.2	3.0	1.8	3.0	1.5													
STC計			52.4	37.5	22.5	16.7	39.0	25.3	18.0	10.3	30.1	24.2	18.0	14.3	0.0	0.0	0.0	0.0	21.0	14.0	12.7	9.9		
Dip.Tech.		1	必修			3.0	2.3														5.0	1.5		
		1	必修	45.0	2.5		0.0																	
		1	必修	40.0	2.1	2.0	1.1												35.0	4.1				
DTE計			85.0	4.5	5.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	4.1	5.0	1.5		
総授業時間数			0.00	205.3	90.6	122.5	84.9	84.0	53.5	95.0	74.4	75.1	58.0	65.0	52.6	50.0	38.8	57.3	35.7	59.8	21.4	47.7	38.5	

注) \*1 : 科学は3クラス、農業、家庭、コンピュータは2クラス  
 \*2 : 科学は2クラス、農業、家庭、コンピュータは1クラス

13. コース・科目別授業時間数と実験・実習室を使用する授業時間数

コース・科目別授業時間数集計表

コース	科目	合計授業時間								
		1学期			2学期			合計		
		全体	実験・実習	実習比率(%)	全体	実験・実習	実習比率(%)	全体	実験・実習	実習比率(%)
DEP	科学科	135	101	74.8	165	123	74.5	300	224	74.7
	農業科	135	81	60.0	65	52	80.0	200	133	66.5
	家庭科	90	68	75.6	60	49	81.7	150	117	78.0
	美術・工芸科	60	47	78.3	40	35	87.5	100	82	82.0
	コンピュータ科	0	0		30	27	90.0	30	27	90.0
	小計	420	297	70.7	360	286	79.4	780	583	74.7
DPE	科学科	184	121	65.8	199	117	58.8	383	238	62.1
	農業科	0	0		60	38	63.3	60	38	63.3
	家庭科	0	0		60	50	83.3	60	50	83.3
	美術・工芸科	0	0		60	48	80.0	60	48	80.0
	コンピュータ科	15	13	86.7	0	0		15	13	86.7
	小計	199	134	67.3	379	253	66.8	578	387	67.0
STC	科学科	371	270	72.8	255	183	71.8	626	453	72.4
	農業科	351	226	64.4	202	154	76.2	553	380	68.7
	家庭科	256	208	81.3	216	185	85.6	472	393	83.3
	コンピュータ科	117	84	71.8	91	72	79.1	208	156	75.0
	小計	1,095	788	72.0	764	594	77.7	1,859	1,382	74.3
Dip. Tech.	科学科	85	68	80.0	65	45	69.2	150	113	75.3
	コンピュータ科	35	29		25	23	92.0	60	52	86.7
	小計	120	97	80.8	90	68	75.6	210	165	78.6
合計		1,834	1,316	71.8	1,593	1,201	75.4	3,427	2,517	73.4

科目別・学期毎授業時間数

科目	合計授業時間								
	1学期			2学期			合計		
	全体	実験・実習	実習比率(%)	全体	実験・実習	実習比率(%)	全体	実験・実習	実習比率(%)
科学科	775	560	72.3	684	468	68.4	1,459	1,028	70.5
農業科	486	307	63.2	327	244	74.6	813	551	67.8
家庭科	346	276	79.8	336	284	84.5	682	560	82.1
美術・工芸科	60	47	78.3	100	83	83.0	160	130	81.3
コンピュータ科	167	126	75.4	146	122	83.6	313	248	79.2
合計	1,834	1,316	71.8	1,593	1,201	75.4	3,427	2,517	73.4



## 15. 一般教科の授業時間数(2002年)

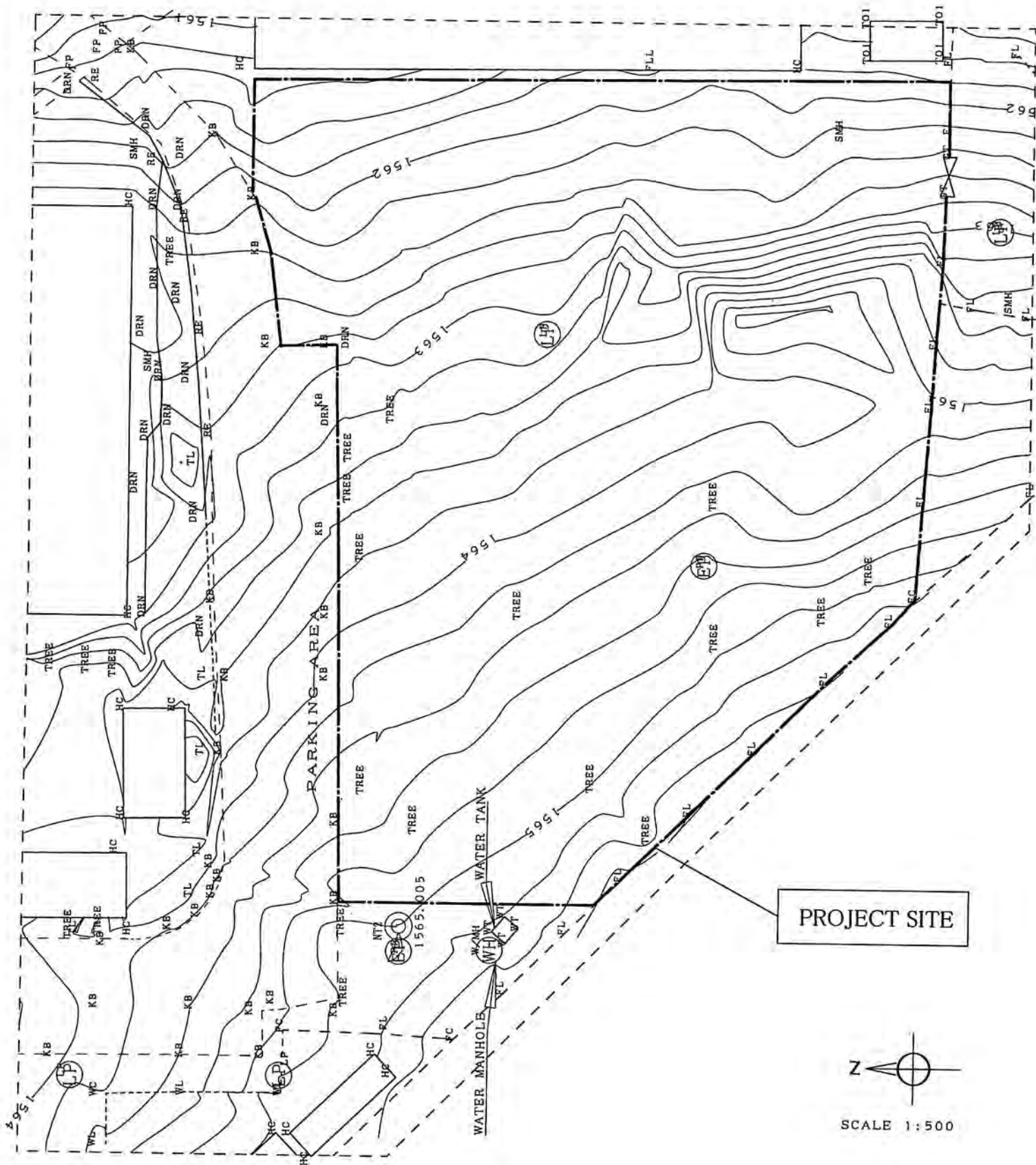
## 2002年における一般教科の授業時間数

	学 年	ク ラ ス 数	授 業 数 /週	実験・実習室を使用する科目					その他の授業		
				科学	農業	家庭	美術・ 工芸	コンピ ュータ	計	授業時 間数	
DEP： 初等教育教員養成 コース		7	24	5	3	3	3	2	8	56	
		6	24	3	3	3	3	0	12	72	
		5	24	3	3	3	3	0	12	60	
		4	24	3	3	3	3	0	12	48	
DPE： 初等教育教員再教 育コース		2	30	3(6) <sup>*1</sup>	(6) <sup>*2</sup>	0	0	6	9(12)	30	
		2	30	3(4) <sup>*1</sup>	(4) <sup>*2</sup>	0	3	0	20(8)	48	
		2	30	(5) <sup>*1</sup>	(5) <sup>*2</sup>	3	0	0	27(10)	64	
STC： 中等教育教員養成 コース		7	27	(7.5) <sup>*1</sup>	3(7.5) <sup>*2</sup>	(7.5) <sup>*2</sup>	0	2	9(15)	101.5	
		6	27	(7.5) <sup>*1</sup>	(7.5) <sup>*2</sup>	(7.5) <sup>*2</sup>	0	0	12(15)	109.5	
		5	27	(7.5) <sup>*1</sup>	3(7.5) <sup>*2</sup>	(7.5) <sup>*2</sup>	0	3	6(15)	52.5	
Dip.Tech.： 中等技術教育教員 資格コース		1	36	4	0	0	0	10	7 <sup>*3</sup>	7	
		1	39	3	0	0	0	6	15 <sup>*3</sup>	15	
		1	28	3	0	0	0	6	5 <sup>*3</sup>	5	
合計		46								668.5	

注： \*1 ( )内は選択教科授業時間数。2教科から選択。

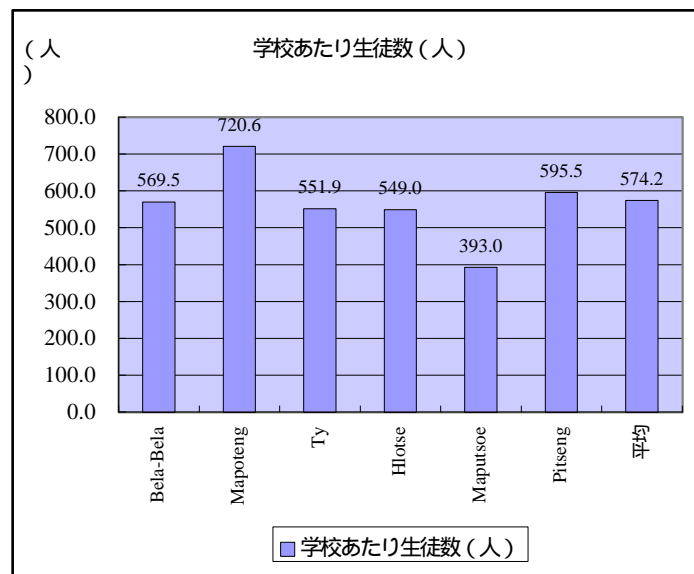
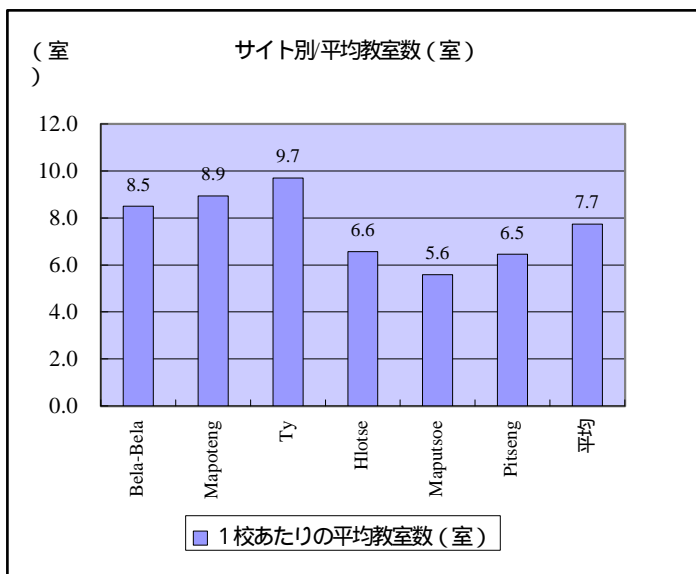
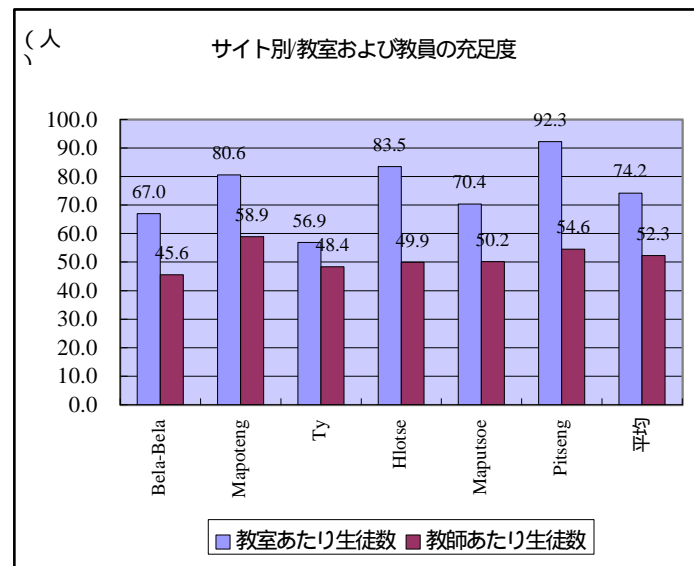
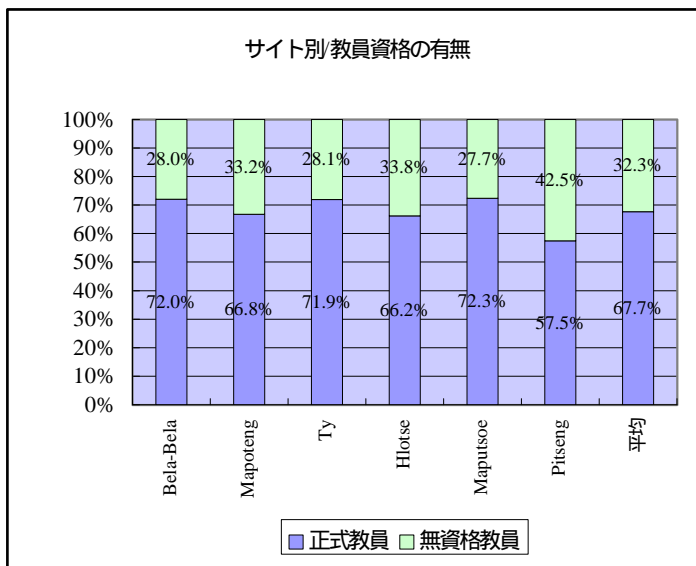
\*2 ( )内は選択教科授業時間数。3教科から選択。

\*3 木工実習、金工実習等の技術教育実習室で実施する授業時間数を削除した値。



In-Service Trainingの受講生へのアンケート分析 (2000年4月15日、サンプル数64名)

- 76 -



17. アンケート結果

18. 当該国の社会経済状況

レソト王国
Kingdom of Lesotho

一般指標				
政体	立憲君主制	*1	首都	マセル (Maseru) *2
元首	国王/レツィエ3世	*1,3	主要都市名	レリベ、マフェテン、モハレスフク *3
独立年月日	1966年10月4日 (英国から独立)	*3,4	雇用総数	844千人 (1998年) *6
主要民族/部族名	ツ族99.7%、他に欧州系、7ジ7系	*1,3	義務教育年数	7年間 (年) *13
主要言語	英語、ソト語	*1,3	初等教育就学率	107.7% (1997年) *6
宗教	キリスト教	*1,3	中等教育就学率	30.7% (1997年) *6
国連加盟年	1966年10月17日	*12	成人非識字率	16.1% (2000年) *13
世銀加盟年	1968年7月	*7	人口密度	67.80人/km2 (1998年) *6
IMF加盟年	1997年3月	*7	人口増加率	2.4% (1980年) *6
国土面積	30.00千km2	*6	平均寿命	平均 56.00 男 54.70 女 57.30 *6
総人口	2,058千人 (1998年)	*6	5歳児未満死亡率	144/1000 (1998年) *6
			カロリー供給量	2,209.0cal/日/人 (1996年) *10

経済指標				
通貨単位	ロティ (Loti)	*3	貿易量	(1994年)
為替レート	1 US \$ = 6.89 (2000年 8月)	*8	商品輸出	143.5百万ドル *15
会計年度	Mar. 31	*6	商品輸入	-810.2百万ドル *15
国家予算	(1997年)		輸入カバー率	(月) (1997年) *14
歳入総額	1,651.5	*9	主要輸出品目	工業製品、食料・動物、ダイヤモンド *1
歳出総額	1,743.7	*9	主要輸入品目	資本財、食料、燃料 *1
総合収支	120.9百万ドル (1994年)	*15	日本への輸出	0.01百万ドル (1998年) *16
ODA受取額	66.2百万ドル (年)	*18	日本からの輸入	4百万ドル (1998年) *16
国内総生産(GDP)	792.42百万ドル (1998年)	*6		
一人当たりGNP	570.0ドル (1998年)	*6	粗外貨準備額	0.0百万ドル (1998年) *6
GDP産業別構成	農業 11.5% (1998年) *6		対外債務残高	692.1百万ドル (1998年) *6
	鉱工業 42.0% (1998年) *6		対外債務返済率(DSR)	8.4% (1998年) *6
	サービス業 46.5% (1998年) *6		インフレ率	12.1% *6
産業別雇用	農業 男 % 女 % (1992年) *6		(消費者価格物価上昇率)	(1990-98年)
	鉱工業 % % (1992年) *6			
	サービス業 % % (1992年) *6		国家開発計画	
実質GDP成長率	7.2% (1990年)	*6		*11

気象	(年～年平均)													
	月	1	2	3	4	5	6	7	8	9	10	11	12	平均/計
降水量														mm
平均気温														℃

- \*1 各国概況 (外務省)
- \*2 世界の国々一覧表 (外務省)
- \*3 世界年鑑2000 (共同通信社)
- \*4 最新世界各国要覧10訂版 (東京書籍)
- \*5 理科年表2000 (国立天文台編)
- \*6 World Development Indicators2000
- \*7 The World Bank Public Information Center, International Financial Statistics Yearbook 1998
- \*8 Universal Currency Converter
- \*9 Government Finances Statistics Yearbook1998 (IMF)
- \*10 Human Development Report1999(UNDP)
- \*11 Country Profile(EIU),外務省資料等
- \*12 United Nations Member States
- \*13 Statistical Yearbook 1999(UNESCO)
- \*14 Global Development Finance1999(WB)
- \*15 International Finances Statistics 1999(IMF)
- \*16 世界各国経済情報ファイル1999(日本貿易振興会)

注：商品輸入については複式簿記の計上方式を採用しているため

	レソト王国
	Kingdom of Lesotho

我が国におけるODAの実績		(資金協力は約束額ベース、単位：億円) *17			
項目	暦年	1995	1996	1997	1998
技術協力		0.27	0.28	0.30	0.37
無償資金協力		9.87	5.28	2.99	0.39
有償資金協力		0.00	0.00	0.00	0.00
総額		10.14	5.56	3.29	0.76

当該国に対する我が国ODAの実績		(支出純額、単位：百万ドル) *17			
項目	暦年	1995	1996	1997	1998
技術協力		0.68	0.25	0.21	0.34
無償資金協力		1.12	7.66	5.53	3.29
有償資金協力					
総額		1.80	7.91	5.74	3.63

OECD 諸国の経済協力実績		(支出純額、単位：百万ドル) *18				
	贈与 (1) (無償資金協力・ 技術協力)	有償資金協力 (2)	政府開発援助 (ODA) (1)+(2)=(3)	その他政府資金 及び民間資金(4)	経済協力総額 (3)+(4)	
二国間援助 (主要供与国)	32.0	0.5	32.5	-60.3	-27.8	
1. United Kingdom	8.7	0.0	8.7	-81.5	-72.8	
2. Ireland	7.4	0.0	7.4	0.0	7.4	
3. Germany	5.7	0.0	5.7	-18.4	-12.7	
4. Japan	3.6	0.0	3.6	0.0	3.6	
多国間援助 (主要援助機関)	19.1	15.8	34.9	-3.6	31.3	
1. EC			12.9	0.0	12.9	
2. IDA			12.5	0.0	12.5	
その他		-1.2	-1.2	0.0	-1.2	
合計	51.0	15.2	66.2	-64.0	2.2	

援助受入窓口機関	*19
技術協力：大蔵・経済計画省	
無償：大蔵・経済計画省	
協力隊：	

\*17 我が国の政府開発援助1999(国際協力推進協会)

\*18 Geographical Distribution of Financial Flows to Aid Recipients 2000(OECD)

\*19 JICA資料

## 基本設計調査 (2000年4月5日 ~5月1日), DF調査

資料入手先	
No.	資料名
<b>National Teacher Training College</b>	
NT-1	Staff Profile - Primary Pre-service Division - NTTC 2000
NT-2	STAFF LIST
NT-3	STAFF LIST - SECONDARY DIVISION
NT-4	National Teacher Training College (Organizational Structure)
NT-5	Suggested Academic Organizational Structure
NT-6	TARIFF (Electricity)
NT-7	TARIFF (Water)
NT-8	BASIC REQUIREMENTS FOR THE PROJECT (JAPANESE)
NT-9	Tentative Plan For New Building Use (Science, H.E. )
NT-10	Estimate Of Cost For Telephone Provision To New Buildings At NTTC
NT-11	Time Tables (Agriculture, Science, Computer, Laboratory 41/42)
NT-12	RECURRENT ESTIMATES 2000/2001 NATIONAL TEACHER TRAINING COLLEGE
NT-13	RECURRENT ESTIMATES 1999/2000 NATIONAL TEACHER TRAINING COLLEGE
NT-14	LESOTHO Government Gazette EXTRAORDINARY Vol. XLIII Friday - 27th March, 1998 No.20
NT-15	BUDGET INFORMATION (Expenditure, Revenue)
NT-16	NTTC CALENDER 2000
NT-17	Number of Student (2001-2004)
NT-18	Revised Proposal For: Diploma In Education (Secondary) Vol. 3
NT-19	Ancillaries for STC
NT-20-1	Answers to Questionnaire 2.1.3(8)
NT-20-2	Answers to Questionnaire 2.1.4
NT-20-3	Answers to Questionnaire 2.2.6
NT-20-4	Answers to Questionnaire Chapter 7
NT-21	The Lesotho College of Education- Calender 2000 (Copy)
NT-22	Project Progress Report Summary (Education) (Copy)
NT-23	Projected Mid-year Population by Age and Sex (Numbers) 1996 to 2020 (Copy)
NT-24	National Teacher Training College Revised Proposal for Diploma in Education (Secondary) (Copy)
NT-25	Ministry of the Republic Circular Notice No. 9 of 1998 (Copy)
NT-26	Lesotho College of Education, Terms and Conditions of Service (Copy)
NT-27	Lesotho Government Gazette Extraordinary VOLXLIII Feb-27th March, 1998 No. 20 (Copy)
NT-28	National Teacher Training College Application Form
NT-29	Time Table for Science Laboratory 41
NT-30	Projected Number of Students and Classes in DES
<b>Ministry of Education</b>	
ME-1	Estimates of the Kingdom of Lesotho for the year from 1st April 1998 to March 31, 1999(Copy) Part 1 Revenue and Expenditure Account
ME-2	Estimates of the Kingdom of Lesotho for the year from 1st April 1998 to March 31, 1999(Copy) Part 2 Development Account
ME-3	Ministry of Education Strengthening Secondary Education Project Progress Quarterly Progress Report April-July 1999 (Copy)
ME-4	AfDB, Appraisal Report, Education II Project (Basic Education Improvement) August 1998 (Copy)
ME-5	Strengthening Secondary Education Project, Status of the Project, Ministry of Education, Planning Unit (Copy)
ME-6	Project Appraisal Doc. on a Proposed Credit in the Amount of SDR 15 million to the Kingdom of Lesotho for a Secondary Education Sector Development Project
<b>Lands and Survey Physical Planning</b>	
LS-1	TOWN MAP OF MASERU
LS-2	Aerial Photograph (NTTC)
<b>Ministry of Works</b>	
MW-1	MINISTRY OF WORKS EXTERNAL CIRCULAR NOTICE No.5 of 1996
<b>Lesotho Meteorological Services</b>	
MS-1	Meteorological Data
<b>Maseru City Council</b>	
MC-1	CERTIFICATE TO BE SUBMITTED BY THE ENGINEER

<b>Lesotho Telecommunications Corporation</b>	
TC-1	TARIFFS
<b>WASA</b>	
WA-1	WASA TARIFF STRUCTURE
WA-2	Answers to Questionnaire
<b>European Union</b>	
EU-1	NATIONAL INDICATIVE PROGRAMME
<b>World Bank</b>	
WB-1	OVERVIEW - Lesotho and the World Bank
<b>ZMCK</b>	
ZM-1	The Steeledale Lattice Beam Slab Structure
ZM-2	
<b>FLASH</b>	
FL-1	BIDDING DOCUMENTS - ALTERATIONS TO EXISTING STUDENT HOSTELS
<b>(Drawings)</b>	
DR-1	Hostel Type A (Floor Plans - GF)
DR-2	Hostel Type A (Floor Plans - 1F,2F)
DR-3	Hostel Type A (Sections and Elevations) -1
DR-4	Hostel Type A (Sections and Elevations) -2
DR-5	Type A Hostel Slab Layout - 1st Floor
DR-6	Type A Hostel Slab Layout - 2nd Floor
DR-7	Type A, B & C Hostels Beam Reinf -1
DR-8	Type A, B & C Hostels Beam Reinf -2
DR-9	New Student Hostels (Site Plan : Mech & Electrical Services)
DR-10	New Student Hostels (Site Plan : Foul Sewer Layout)
DR-11	NTTC Photographic Viewpoints and Site Plan
DR-12	NTTC Site Plan
DR-13	New Office for NTTC (Ground Floor Plan)
DR-14	New Office for NTTC (Extrenal Works Layout)
DR-15	New Office for NTTC (Foundation Layout)
DR-16	NTTC Campus (Topography)
<b>Others</b>	
OT-1	LESOTHO business directory 2000
OT-2	LESOTHO REVIEW 2000 - A REVIEW OF COMMERCE, INDUSTRY AND TOURISM