Chief Minister's Scheme of Life Oriented Education

(CMS LOE)

PHILOSOPHY, PURPOSE, POLICY, PLANS, PROGRAMMES AND GUIDELINES

J. A. RYAN

Director of School Education & SCERT
Madras - 600 006.

ASIAN PRINTERS, MADRAS-600 014.

CONTENTS

V. PILOT PROJECTS

VI. PROBLEMS AND PROPOSITIONS

"We shall reorganise vocational education to align it with Industry, Agriculture, Communication and other productive sectors of our economy."

RAJIV GANDHI
Prime Minister of India

"Our Noon Meal Programme and proposed vocational system are meant to prepare the young pupils for employment oriented learning."

M. G. RAMACHANDRAN
Chief Minister of Tamil Nadu

"Government is quite serious about vocationalising the education system and delinking jobs from degrees."

K. C. PANT,
Minister for Education,
Govt. of India.

"Education should provide the necessary skills for the boys and girls so that they could find suitable vocations or sellf-employment. Towards this end, vocationalisation of education at all levels has been contemplated.

V. R. NEDUNCHEZHIAN,
Minister for Finance, Tamil Nadu..

C. ARANGANAYAGAM,
Minister for Education

FORT ST. GEORGE,
MADRAS-9.

1st February, 1985

FOREWORD

This brochure has been designed to acquaint the people of Tamil Nadu with aims and objectives of the Chief Minister's Scheme of Life Oriented Education in the school system. A lucid attempt has been made to present the scope and aims of the scheme and to indicate its place in the total education programme.

Life Oriented Education will be recognised as a part, and a very important part, of the total educational system. It is designed to prepare youth for purposeful work and healthy living. In a democracy such as ours, it is necessary that the schools prepare every individual to assume his responsibility as a citizen, as a home member and as a worker

The materials in these pages give a general picture of the programme to be provided to children in our schools as a preparation for life. It is my sincere hope that the publication will help teachers, parents, pupils, professionals and the public to get better acquainted with the opportunities to be provided for our youth which will be useful for their future.

C. ARANGANAYAGAM

We want our school education to be production oriented and our students to realise the dignity of labour.

K. CHOCKALINGAM, I.A.S.
Chief Secretary to Government of Tamil Nadu

"The nature and items of school courses should be largely determined by the aspirations of students and parents on one side and the demands of the Captains of Trade, Commerce, Industry and other establishments on the other

T. D. SUNDAR RAJ, I.A.S.,
Commissioner and Secretary to Government, Education Department, Tamil Nadu.

1

PHILOSOPHY AND PURPOSE

None has ever yet found a method of teaching a skill, whether singing or dancing, riding or driving, swimming or playing, spinning or weaving, sewing or cooking, drawing or painting or any other trade by any other method than by practice and experience. Reading, writing and counting can be learnt only by actually reading, writing and counting for oneself.

1.1 PLAY WAY APPROACH

Very often our method of teaching hygiene and personal cleanliness is to tell pupils by word what to do. They can perhaps reproduce these words, but they do not practise and so they do not learn. The theory is often not carried into practice. in most of our schools it is still common to find children being taught to do elaborate sums in litres, grams, metres, centimetres, hectares, feet or inches without ever learning to know by touch or sight or observation the actual weights measures and quantities involved. Science teaching sans equipment, sans demonstration sans practice and experimentation is a dismal feature in most of our schools. The student of physics who cannot replace a faulty electric fuse or the boy who has done gardening but cannot recognise the field plants of his own neighbourhood and the girl who has studied homecraft but cannot cook a simple meal, are unfortunately not rare to find in real life.

1.2 We place the ideals of CITIZENSHIP TRAINING before the schools. Unless it is carried out whole-heartedly on the principle of 'Learning by doing' we will not succeed in teaching citizenship, but only words about citizenship. Anyone who is familiar with the actual school situation can think of many more examples of this type.

1.3 The young school children are interested in the living plants and creatures which they see around and in all kinds of objects which they can see or touch or manipulate. They are interested In how things are done-in singing, dancing, drawing, painting, playing, sweeping, cleaning, cooking,in how people till or fish or weave, in the Mason's trowel, the potter' s wheel, the carpenter's tool and the smith's hammer. Much of the play of children consists in the imitation of the adult activities of the community; they are absorbed in an occupation which satisfies at one and the same time their love of manipulation, their special interests, and their urge to create and produce things.

1.4 CREATIVITY

As children become acquainted with the world around they begin to use the

objects and materials available to express their thought and feelings. Some children are capable of creation as a natural form of expression without adult help or stimulation. Others may need an environment which supplied both the material and the encouragement of a parent or a teacher. Because each child is an individual, children are creative in different degrees in different media and not all of the children' s environment for creative expression is at school; Quite a lot of it is at home and in the community as well. Creative experiences contribute substantially to physical, mental, spiritual and emotional aspects of the child' s life All these are essential to make a well-balanced personality.

1.5 WHITE COLLAR APPROACH

Gandhiji's greatest contribution to education lies in the theory he propounded that education should centre round some manual and productive work.

1.6 The main drawback of our present educational system is that the academic type curricula are framed to cater to the needs of a small number out of the large output of the educational system. The problem facing us is what will happen to the lakhs of children who would pass through compulsory education at the age of eleven, or later at fourteen, or further up when they complete the high school or the higher secondary school.

1.7 Many of them stop away from school at various stages. According to current computation, out of twelve pupils enrolled in Class I, only three reach Elementary or Middle stage. What is to happen to these millions is a matter to ponder over. Many who have completed the secondary or higher secondary stage, compete for the very small number of seats available for doctors, nurses, business managers, veterinarians, engineers, technicians, administrators, teachers, farm specialists or agricultural supervisors. A small number obtain employment in the clerical and service occupations, the rest begin the interminable wait for the white collar jobs that are not easily available.

1.8 Unemployment is a major problem and is particularly severe among the young school leavers. The educated group with the highest rate of unemployment is formed by those with secondary education and the next lot belong to the university group with degrees in Arts, Science and Commerce. The sort of education provided at the secondary level seems to create unrealistic aspirations in the young who look only for certain types of work or jobs with certain minimum incomes, particularly the traditional white collar jobs. Clearly, the availability of such jobs cannot keep pace with the demand generated by more than 25,0000 young people successfully coming out of the secondary schools in Tamil Nadu every year. The chances of employment for the University graduates in Arts and Science and other academic courses seem to be no better. They often compete with the school finalists for jobs leading to underemployment.

Our educational system has also discouraged any initiative and enterprise so that the school-leaver is unable even to think of any alternative. It has taught him to value mental work very highly and to look down upon manual labour. The development of this general attitude is supported by the fact that the content of the school curriculum has had little relation to the world of work.

1.9 CHANGING LIFE STYLES

If the economic condition of our society is to improve, a fillip must be given to the development of industries, especially small scale, cottage and home industries which are bound to come up due to varied requirements of modern living and changes in life styles. Various production processes are sure to undergo considerable mechanization, automation and computerisation in the near future. Electricity facilities will be reaching almost all villages and remote areas. Health and consumer services will be improving. Agricultural productions and farming, the main occupation in remote parts and home making conditions in urban areas are fast changing with mechanization.

1.10 The impact of the press, radio and television will be immensely felt even in the remote parts of the State. All these services need man power, trained man power for making, manufacturing, management and maintenance.

1.11 TRAINED MAN POWER

In a world which has apparently diminished to smaller proportions due to faster means of transport and communications, we cannot afford to remain isolated and unaffected by the scientific and technological advancement which have engulfed the world. Our fast growing population poses a serious problem. No doubt famiiy planning is gradually picking up. But the real problem is to create wealth and new avenues of employment by full utilisation of the natural resources and execution of welfare services and providing opportunities so that every individual shall be assured of work and shall live by honest work, congenial to his nature and aptitude.

1.12 Trade, Commerce, Inudstry, Business, Agriculture, Animal Husbandry, Health Service, public utility service and the home and society, all require men and women with a basic knowledge of science, high degree of manipulative skill, technical capacities and competence in specific areas and adaptability. All these services will require more trained persons with skills combined with training for scientific management. For the chain of cultural and welfare services, the services of junior level personnel are of utmost inportance for rendering service to a growing society. Deficiencies either in number or in the training of personnel for these vocations will lead to poor maintenance of plants, equipment, materials and services, causing frustration to the users and high infructuous costs to the economy.

1.13 THREE LEVELS OE EMPLOYMENT

In farms, firms, factories, trade, business and health services, trained personnel are broadly required at three levels, - the lower level, the middle level and the top level. The appoximate proportion of the top level to the intermediate and to the lower level is of the order of one to ten to a hundred. Of course, this will vary with different organisations. But it is certain that the proportion of the junior level workers would be very much larger than the managerial and high level technical and professional staff. What is lacking today is the training of skilled and semi-skilled workers who are requirded at the lower and middle levels in such large numbers for the various occupations. A severe drawback of our education system hither to has been the lack of a planned programme of providing adequate facilities for vocational education at the secondary

stage in the varied vocations corresponding to the varied needs of society.

1.14 THEORY AND PRACTICE ESSENTIAL

Pre-vocational training at the completion of compulsory primary education and vocationalisation of secondary education for those who are not academically minded is the urgent need of our times. The facilities that exist today in the form of industrial schools, trade schools, agricultural schools, commerce and business schools, schools for training paramedical personnel schools for home makers, ITIs, polytechnics etc. are inadequate and limited. Most of them are established in urban and semi-urban areas around towns. Further, these trainees just get practical training which has only meagre theortical background and core subject knowledge. But if the worker is to be efficient in his work, he must have some basic theoretical knowledge, the why and wherefor of the work and a scientific understanding of the processes involved.

1.15 Hence in the pre-vocational and vocational courses, the basic sciences, concerned with a vocation are necessary since the intention is not to produce a man with only manual skills. Therefore biology or chemistry, physics or mathematics, commerce or accountancy, home science or economics which is related to the vocation will have to find an appropriate place in the system. Science education should follow the pattern of 'Learning by Doing' than learning by heart the laws and principles.

1.16 SELF-EMPLOYMENT

When speaking of employment it is not always that the organized sectors hold out greater possibilities. There is need to draw special attention to the possibilities of self-employment starting small scale or home or cottage industries in view of the emphasis laid in the *Prime Minister's Twenty Point Programme and the Five Year Plans* on this sector. There is now a far more generous availability of technical advice, financial assistance and help towards setting up small scale industries, marketing the products and even orientation programmes are provided for the educated unemployed.

1.17 What is now needed is an appropriately favourable attitude towards self employment on the part of the youth, away from the conventional avenues of employment. Vocational surveys show that among the educated there is already a significant number who are willing to try self employment as a possible career if proper guidance and facilities are made available. This welcome trend requires to be strengthened. Small scale and medium industries have made remarkable progress in countries where natural resources are plentiful and where people have, in addition to initiative and energy, independence and individuality, which prefers to establish an improvised workshop or a house farm in the backyard to employment in a factory or farm managed by some others. Our youth can be prepared for such self employment by adequately including *entrepreneural* training as part of the vocational study at the school stage.

1.18. VOCATIONAL PREPARATION

In recent years there has been a growing awarenessof the needs of young people who are about to enter working life. At the same time, employees are making it clear that several young people who apply for jobs have little or no idea of working life. In this situation, vocational Preparation of young people at the school stage will help to bridge the gap between the school and the world of work.

1.19. In order to maintain peace and efficiency in the occupational millieu every Prospective worker shall not only be a skilled hand, but also an educated man, an Intelligent artisan, a cultured person and a responsible citizen.

" The major policy and objectives of Education should be, besides adding to knowledge itself and the ability of using it for constructive and creative purposes, to promote faith in our country and to build self-reliance and resourcefulness in the individual; he must acquire the ability to meet any situation and take advantage of any opportunity. In fact, he should be capable of creating opportunities."

— Smt. **INDIRA GANDHI**

2

THE POLICY AND PRONOUNCEMENT

In the backdrop of this situation, our Chief Minister, Dr M. G Ramachandran has conceived an educational design to reshape the school system to make it related to life needs and employment oriented.

2.1 The following words of the Chief Minister convey the basic concept of the new educational design :

"I would like to touch upon the basic arguments which guided by us in going in for the Midday Meals Programme and which compelled us to adopt a wholesale job-oriented shift in the educational system with efforts to guarantee employment. With our poverty levels and endemic mal-nutrition, the impact of the Midday Meals Progamme has to be judged not on a superficial level of arithmetical calculation but by reckoning its effects on the health life expectancy and general well-being of the younger generation. This programme has a direct bearing on school enrolment and an important auxiliary advantage has been the creation of wide-spread employment, not to mention the social benefits achieved in eradicating caste and communal differences.

"Our educational system turns out every year large numbers of unabsorbable labour force whose sense of frustration aggravates the social unrest. We contemplate a system under which a major percentage of the school-going children can be profitably equipped with skills that are relevant and applicable to the economic milieu of the various localities. Therefore, what we plan is an area specific vocational education which does not stop with providing students with non specific skills but which would equip them with highly relevant vocational aptitudes and help them in finding jobs or sustaining them on self-employment

"Thus, our Noon Meal Programme and the proposed vocational system are meant to prepare the young children for employment - oriented learning and when they complete their education, they will be provided with facilities to start small industries in their respective areas."

2.2 Later addressing the National Development Council which met under the distinguished chairmanship of Tmt. Indira Gandhi, Prime Minister of India on the 12th and 13th July, 1984 at New Delhi, Dr. M G. Ramachandran said.

"The only way in which rural unemployment can be tackled on a long term basis will be through the organised creation of appropriate skills in the villages, which are relevant to local needs. This would call for a reorientation of our approach towards education. The educational system must cease to throw up unabsorbable labour force into the market but must, instead, turn out

" I would like to touch upon the basic arguments which guided us in going in for the Midday Meals Programme and which compelled us to adopt a wholesale job oriented shift in the educational system with efforts to guarantee employment ".

Dr. M. G. RAMACHANDRAN,
Chief Minister of Tamilnadu

adequate labour strength at appropriate levels whose vocational competence relates to the needs of the locality. This will have to be codsidered as a national programme and the entire cost in ordering a switch-over of this magnitude will have to be taken up by the Centre as a fully financed Central Scheme. This programme of Life Oriented Education has been estimated to cost about Rs. 1000 crores for Tamil Nadu in the Seventh Plan. The Seventh Plan which has rightly put its emphasis on employment should consider this as the obvious corollary of such an objective and provide sizable provisions for investment in this sector.

"Common considerations of convenience and the imperative of national integration will both dictate the necessity for a uniform syllabus in our educational system throughout the country. Such a syllabus should be worked out by joint consultations of all the State Education Ministers, so that the needs and aspirations of the various States in the country get fully reflected in the deliberations."

2.3 Our Prime Minister Mr. Rajiv Gandhi was quick to discern the immediate need to reform education so as to relate it to life and in his very first broadcast to the Nation emphatically said,

"Education must promote national cohesion and the work ethic. The grandeur of our freedom struggle and its significance for national integration have to be brought home to every student. Our schools and colleges should acquaint to younger generations with India's ancient heritage and culture. The curricula and the text books should curb parochial and communal interpretations of our composite culture.

"I have looked at some of the policies and programme in this field. I have asked that a new national education policy be drafted.

"We are formulating programmes to use on a large scale the new communication technology in our school system. Delinking of degrees from jobs under Government is under active consideration. Steps are being taken to establish an open university to bring higher education within easy reach of all. The Central Schools organisation will be expanded. These schools will function as Centres of Excellence in every district of our country.

"I would strongly emphasise education's organic link with the productive forces of society. We shall reorganise vocational education to align it with industry, agriculture, communications and other productive sectors of our economy."

2.4 In the Budget Session 1984, the Minister for Finance Dr. V, R. Nedunchezhiyan announced,

"This Government strongly feels that the education system requires reorientation in order to fulfil its primary purpose of creating manpower, equipped to be absorbed in the labour market. Education should provide the necessary skills for the boys and girls so that they could find suitable vocations or self-employment. Towards this end, vocationalisation of education at all levels has been contemplated. In view of the heavy financial commitment, we had also sought the assistance of the Eighth Finance Commission in implementing the restructuring of the educational system with the provision to impart appropriate skills at various stages of education so that the employment opportunities specific to the regions and localities can be fully exploited. A detailed blue-print for this is under preparation,

inclusive of suitable alterations and strengthening of curricula. It will be taken up with Government of India in the coming years for phased introduction from 1985-86."

2.5 Thiru. C. Aranganayagam, Minister for Education in his address said that our aim is to impart knowledge and skills to school students to help them blossom into healthy citizens, capable of earning their livelihood and helping the society to progress. The Hon'ble Prime Minister has been often stressing the moral values in education and the need to reform our curriculum and text books The Hon'ble Chief Minister of Tamilnadu has been emphasising the need to provide career-oriented or work-oriented education at all levels to equip them with the competence to get gainful employment when they leave school.

Vocationalisation of Higher Secondary Education introduced in 1978 is a major thrust in the reconstruction of school education, and it is our earnest desire that pupils at all levels should acquire the basic educational skills and the basic manual skills needed for their future education and for entering the world of work.

3

PLANS AND PROPOSALS

3.0 Concept of Life Oriented Education

The most important element of the reform envisaged is the introduction of Life Oriented Education (LOE) in the general curriculum of the primary and secondary schools in Classes I to XII so as to prepare the younger generation for their role as healthy, well informed, enlightened, loyal and socially useful citizens fully equipped with academic abilities and vocational skills to earn their livelihood.

3.1 The essential ingredient of such education is the healthy and harmonious development of the personality of the educand and his preparation for life. To the above end, the emphasis will be on the promotion of the following basic values of life :

- Mental health and a sound mind,
- Physical health and a sound body,
- Good character and morality and respect for elders
- A sense of social awareness and co-operation
- Citizenship qualities and democratic living
- Respect for our national heritage and leaders
- Appreciation of our Unity in Diversity
- A secular outlook
- Involvement in meaningful programmes of community service
- Scientific attitude and critical observation of the enviroment
- The dignity of manual labour through Socially useful productive work (SUPW)
- Right attitude to work and those who do manual work
- Improvement in creative and productive activities
- Quality of self-reliance and self-confidence
- Academic competence and vocational skills to sustain oneself

3.2 General plan

The major thrust in the proposed reorganisation will relate to the introduction of Life Oriented Education as an integral part of the comprehensive general education system for all pupils from Classes I to XII with diversiftcation in Classes XI and XII to stream off atleast 50% of the students into the vocational courses by the end of the Seventh Plan period. Vocationalisation in Classes *XI and XII* has been an on-going programme since the introduction of Plus Two system in 1978. (Annexvre I) In *Standards. IX and X,* besides the general school studies, courses allied to vocational courses offered at the Plus Two stage or other kinds of work

oriented courses based on local needs will be designed. In *Standards VI to VIII* Life Oriented Courses will among other things aim at development of skills in general by the use of tools and simple machines in non-specific areas which will be conducive to pursuing job-oriented skills in the higher classes or for entering the world of work. In *Standards I to V*, where pupils will develop educational skills under compulsory education, they will also be provided with scope for development of simple manipulative skills.

3.3 Thus Life Oriented Education will be compulsory and form an essential part of school education from Standards I to XII, starting from elementary mauipulative skills and leading to productive work oriented education towards specific job areas. The training imparted at the secondary stage and above will be intensive and in real work situation. It is expected to provide the student, with knowledge and exploratory experience and skillls required for successful job entry, job adjustment and job satisfaction. Throughout the school stage the emphasis will be on socially useful activities, besides acquisition of skill of a spceial or specific nature according to age, ability and aptitude of pupils

3.4 A new domain of Learning Experience

It is expected that Life Oriented studies at the primery stage and vocational studies at the secondary stage will bring into the traditional curriculam altogether a new domain of learning experience and also change the attitude to teaching and learn ing implicit in the traditional school practice.

3.5 Curriculam—School stage

In the proposed curriculum change to integrate the academic and vocational aspects of education in the general school system, the aim will be to equip students with a good general educatlon, together with a basic familiarity with one or more vocational opportunities available to them. This does not mean any reduction in academic content. What it means is that the materials taught and the whole process of teaching will have meaning fer the students and will give them the needed self confidence to embark upon a vocation when he or she leaves the school system. It is intended that at the termination of the secondary school programme, vocational education should endow the pupil with a wide and a useful range of skills, cognitive learning and attitudes which would bring about a smooth transition either from school to work or into further or higher educatlon as the case may be. Should the pupil discontinue his studies even before entering the secondary school, he would have acquired certain elementary msnipulative skills under the Life Oriented Studies which would enable him to appreciate the dignity of labour and upon taking up a job enable him to acquire specific skills as part of his work.

3.6 No reduction in academic content

Tne curriculum at rhe Primary, Middle and Secondary levels will comprise as at present the following nine compulsory subjects :

(i) Tamil or the mother tongue,
(ii) English,
(iii) Mathematics,
(iv) Science,
(v) History,
(vi) Geography,
(vii) Moral Education,
(viii) Physical Education,
(ix) Arts, Crafts, Social Training and Pre-vocational studies as part of LOE.

Introduction of Life Oriented Courses will not in any way result in the reduction of the academic content covered at present. On the other hand the common curriculum, under the existing system will be revamped and updated. In respect of LOE, schools will have to adhere to certain general stipulations though they will have a greater degree of freedom in curricular and organisational matters than is possible in other subjects.

3.7 Working hours

Under this reorganisation, schools will be required to work as at present for 200 to 220 days a year, 5 to 5½ hours a day and to allocate 8 periods of 40 minutes each per day. For LOE studies in primary and secondary schools it is expected that about 20% to 25% of the time or roughly 7 or 8 periods will be allocated per week. The organisational aspects and practical work will be left to the discretion of schools especially with regard to bunching of periods or arrangements out of school hours or in planning for work on a seasonal basis.

3 8 Course under LOE

The course in the LOE at the lower stages will cover the following components suitably graded to suit the level of the learners :

(a) Music and Dance,

(b) Drawing and Painting,

(c) Social training,

(d) Elementary life oriented studies related to

(I) Health and Hygiene (Health)

(ii) Food and Nutrition and Home needs (Home Science)

(iii) Hobbies and Community services (Recreation)

(iv) Gardening and Animal wealth (Agriculture)

(v) Trade, Business and Industry (Commerce and Technology)

(e) At least two pre-vocational subjects involving practical study.

3.9 Suitably prepared courses in music, dance, drawing, painting, scocial training and elementary Life Oriented Studies will be campulsory for all students in the primary and middle classes and they will be taught based on the curricular materials prescribed (Synopsis vide Annexure II). One period per week or fortnight will be set apart for each of these components or combination of components. The remaining 4 or 5 periods or extra periods out of school hours will be set apart for practical pre-vocational studies according to the choice of the local school authorities for which practical courses will be developed locally. However schools presenting pupils for the public examination at the end of Class VIII or X will be required to base the teaching of these subjects on syllabuses approved by Government Such a measure will be necessary with a view to preparing a balanced curriculum and ensuring common standards of achievement at each stage.

3.10 Nutritious School Meals for the needy

To combat malnutrition among children, the Chief Minister's Noon Meal Programme has been introduced to cover all needy children in the age group 2 to 10, benefiting about 83 lakhs (8.3 million) children. The Noon Meal will be a great boon to pupils, to sustain them when they are exposed to real work situation and involved in productive work and social service under the 'Earn while you Learn' scheme.

3.11 Curriculum Higher Secondary — General and Vocational Education

Both general education and vocational education streams in the Plus Two stage will have vocational component in the curricula and shall be diversified to satisfy the needs of both the above mentioned streams. Thus, Higher Secondary Education shall be comprehensive, both to be terminal for those who do not want or cannot proceed for further education, but would like to enter the world of work and to have a strong academic foundation for highet studies for those who show intelligence and aptitude for that type of education and would like to go for IAS, IPS, IRS, Higher State Services, Business Management, Engineering, Medical, Agriculture and other scientific and professional courses.

3.12 The vocational education spectrum will consist of a range of knowledge and skills appropriate to the scientific age, occupational and service needs of the society and developing technologies. There will also be scope for studying one or two subjects related to the vocation which may be of help towards verticle mobility in specific areas.

3.13 Students of general education course at Plus Two stage now offer six subjects, two languages and four electives under Arts or Science or of interdisciplinary nature. In future gradually students taking the general education spectrum at the Plus Two stage will offer two languages and four electives as hitherto but one of the electives will be a vocational course. This will be a new element in the vocationalisation of Higher Secondary Education. A detailed note on the working of the vocational courses at the Plus Two stage is given in Annexure-I.

4

PROGRAMMES BY STAGES AND GUIDELINES

4.0 ATTITUDE DEVELOPMENT

The pupil progressing through the LOE system would traverse through certain essential components which would make varying contributions towards educational and vocational maturation.

- School readiness at the Nursery stage, by informal learning and formation of healthy habits.
- Awareness, beginning in the elementary stage, of the general nature of the world of work and the values of a work oriented society.
- Exposition, a primary responsibility of the middle school stage, of young people to visualize themselves in various work settings and their consequent lifestyles.
- Occupational choice, initially tentative, but gaining more prominence in the high school stage.
- Preparation, consisting of vocational or occupational training, placement and job success at the Higher secondary stage and beyond.

4.1. The Nursery or Elementary or Middle School student is no doubt a long way from the employment market, yet he will be developing attitudes which may determine his later career. It is not too early to teach him decision-making skills, though it is not the time to encourage him to make career choices as the employment market is many years away and the occupational pattern also changes. The early school, however can motivate the student to think of himeself as a prospective worker and to recognise the importance of mastering subject matter and acquiring good work habits.

4.2. PRE-PRIMARY SCHOOL

Learning at the Pre-primary stage will place little emphasis on literacy or formal education, the activities being directed mainly towards the children having nutritious meals, recreation and becoming accustomed to group activities such as singing, dancing participation in rhythem groups and group games to promote clean healthy and socially desirable habits. Stress will also be laid on the development of skills in handling paper, drawing, colouring, moulding, lettering and similar materials as well as in the use of simple tools like, ruler, scissors, pen-knife, clips, pins etc. The activities will be designed primarily to introduce very young children to anticipated school-type environment i.e. to provide a bridge between home and school atmosphere.

4.3. This being an impressionable age, it is possible for the young children, to pick up oral language skill in the mother tongue

and in the later months, Nursery Rhymes and oral conversation skills in English for which suitable guidance will have to be provided.

4.4. The physical, mental and emotional growth of the child occurs much before he reaches the age of 5 years. The young child needs so much of protection, warmth, affection and personal attention that careful selection of the child welfare workers or Balasevikas will be of the utmost importance as also their training, because they will be the first outside influence on the child.

4.5. As most of the children will be from disadvantaged areas, particularly the rural and slum areas, various faculties of these children will be undeveloped as they get little stimulus from their parents. Preschool education will compensate the poor home factor to a considerable extent and help the child's physical and mental maturity without any disadvantage.

4.6. A growing fascination of the parents, mostly in urban areas, is to get their children involved in formal reading and writing at this stage. **English medium schools** get patronage on this account. Hence there will be need to promote these facilities in the urban as well as rural areas without any distinction of rich and poor.

4.7. Manuals in regional languages will have to be carefully prepared and provided to serve as guidlines for all the functionaries, incharge of pre-primary education.

4.8. Adequate housing, personal security of women workers and incentives for working in rural, tribal and other difficult areas will have to be provided.

4.9. The State will have to subsidise the production of inexpensive educational equipment and learning aids for use in the Balwadis.

4.10. EXCEPTIONAL CHILDREN

The educational programmes at the early childhood stage will also cover the initial stages of organised instruction for exceptional children including those who, due to mental or physical handicaps, are unable to participate in the same groups along with unhandicapped children. Programmes for the handicapped will have the same objectivities as the programme for others, but these pupils generally require more individual attention. No age limit is specified for exceptional children including the handicapped at this stage.

4.11. PRE - SCHOOL CENTRES IN ALL VILLAGES

Pre-primary education which was an urban phenomenon hitherto has spread into the rural areas of Tamil Nadu in a massive way with the establishment of about 28000 child welfare centres in all the villages from the year 1981 onwards. This is the major step towards equalising and removing the imbalance in the urban and rural educational setting. These child welfare centres will have to be gradually developed into pre-primary education centres. Since children will be fully conversant with the rudiments of learning in the two years preceding the primary level, their development will no doubt be faster in the primary stage.

4 12 PRIMARY SCHOOLS

Towards mental and physical development and development of work habits at the primary level, suitable programmes will have to be designed of a varied and flexible nature to suit local conditions and

available resources. The LOE work at this stage for instance, may relate to:

- the mastery of educational skills
- physical and moral education
- the practice of clean and healthy living
- the learning of elementary skills needed in every day life by the use of simple materials and tools, leading to creative habits and simple productive work wherever possible.
- participation in socially usefull activities in the home, school and in the community, such as cleaning and tidying, helping parent and teachers
- simple handwork with emphasis on exploration and creative thinking and adquiring manipulative skills in such Arts and Crafts as Music and dance drawing and painting, - paper and cardboard work, modelling in clay - spinning and weaving - sewing and needle work - fret and wood work - palm, coir, bead and plastic work - health activities and first aid-gardening and care of plants and trees.
- classroom teaching in the set-up of democratic climate
- curricular activities like chorus singing, reading recitation of Athichudi, Konraivendan, Thirukural etc. and group dances, dramatisation
- conversational English
- programmes of community services in school kitchen
- excursions to places of interest, community centres, farms, firms, factories and business organisations to observe people at work.
- co-curricular activities like games and sports students' assembly, celebration of festivals and birthdays of great personalities.
- reading of stories and brief biographies of different personalities of national, provincial, religious and other importance
- hobbies, collection of pictures, albums, cubbing, bulbul, Jr. Red Cross work

4.13. The nutritious Meal Scheme and the dental care, scheme will be in operation to safeguard pupils' health and well-being

4.14. Timely and regular supply of tools and materials will help to generate practical interest in the pupils. The products and services selected should be useful to the pupil, school or the community.

4.15. The knowledge, accomplishments and skill which they acquire in the work lesson at this level will be of major importance from the stand-point of future, providing a thorough grinding for further manual, agricultural, commercial medical, technical and industrial education in the middle and high school stages. In addition, the knowledge accomplished and skills acquired by the young children will make it possible to initiate them progressively into socially useful work at school and home-keeping work at the house.

4.16. In the lower primary classes the class teachers will have to conduct these programmes. Hence sufficient emphasis should be laid on these aspects in the pre service trainning programmes. For the serving teachers orientation programmes will have to be arranged.

4.17 MIDDLE SCHOOL

In the middle stage where pupils would have reached a certain level of

maturity, Life Oriented Education will take the form of projects leading to acquisition of proper attitudes and knowledge underlying life activities.

At this stage the emphasis will be on proper tool manipulation, production and maintenance and pupils should be encouraged to learn at least three or four of the following elementary skills:

- Music and dance and use of musical instruments.
- Drawing, painting, colouring.
- Simple woodwork and furniture repair.
- Paper, cardboard and decorative materials.
- Simple sheet metal work, soldering and brazing.
- Simple metal cutting and working, without machine tools.
- Palm leaf and coconut leaf works
- Simple building craft, plumbing, masonry, bricks and tile setting
- Cycle repair, scooter repair, pump-set repair
- Gardening, agriculture and tree planting
- Assistance in poultry-farming, bee-keeping, Pisciculture, Domestic animal Pen
- Cooking, fruit preservation-water for drinking
- Cutting, sewing by hand and dress making
- Knitting, darning, tailoring, mending of clothes
- Cane, mat, fibre, brush, broom and bamboo work
- Egg shell, sea-shell, bone, horn work
- Match, candle, agarbathi making
- Rexine, canvas, leather, plastic work
- Making soap, scent, phenol, detergents, ink
- Oil pressing and extraction
- Pottery, ceramics
- Spinning and weaving
- Laundry, home making, household work
- Shop assignments, errand boys, newspaper boys
- Sports, games athletics and group activities
- First aid and ambulance work, Prevention of disease and Pollution, Scouts and Guides, Junior Red Cross.
- Community Service in school kitchen, school farm, play ground, hobbies like making albums, scrap books
- Making soak pits and compost pits
- Excursion to places of interest, farm, factories and offices
- Cleaning and white washing and painting walls
- Play enacting on the life of national and local leaders, National Integration
- Maintenance of bio-data of self, relations and friends

The list is only suggestive

These courses would demand the supply of tools, equipments and raw materials adequately, regularly and periodically.

4.18. The object of manual and technical instruction at this stage is to impart a

general, technical, agricultural commercial nursing and domestic knowledge and skills to develop technical thinking and creative capacities in the pupils; to foster in them a favourable attitude to work and to labour conditions in general to help them give expression to their own inclination; find their bearing in the various sphere of human activity and make a careful choice of their future vocations. The instruction given in some of these courses will be somewhat polytechnical in character. It will include work in the school workshops, practical and experimental work, agricultural and domestric science activities. Use of the hand tools and certain machine tools will be recommended so that the basic skill will help them for their future.

4.19. For Middle school students, the LOE component will be implemented primarily through activities in the classroom, observation of the world of work gained through field trips, visit to the place of work of the artisans and by bringing farm, business, factory, industrial and labour representatives into the classroom. A training of this sort will help the students who are leaving school for work with the means to make a successful transition from school to work. This may become part of education at least for some students.

4.20. SECONDARY EDUCATION

Job Oriented Course for ail the students :

The aims and objectives of Life Oriented Education generally stated in the previous pages need not necessarily govern equally all its stages. The objectives at the Secondary stages will necessarily be distinct from those for education at earlier stages. For harmonious development of the personality, it is necessary, at the Secondary school level, to expose students not only to academic areas for intellectual development but also to situations where they will have opportunities to work with their hands and develop proper attitudes towards work and manual labour. The aim of this curricular area will be to provide all the students with opportunities for participating in social and economic activities inside and outside the classroom, enabling them to understand scientific principles and processes involved in different types of work and in the setting in which they are found in the physical and social environment. Interaction between education and work has to be established by integrating work in the educational process; and by taking education to work situations.

4.21 Students participation in productive work intensively is a new concept in Secondary Education. In order to promote public acceptenace of these changes it is essential to ensure that education is neither diluted nor seen to be diluted through the integration of Life Oriented Education. These concepts may not admit of voluntary participation of students in productive work. Past experience has also shown that the approach of providing work education on an optional basis has not served the purpose of linking education with work. Exposure to work has inevitably to be compulsory at this stage for all students.

4.22 EXISTING FACILITIES TO BE IMPROVED.

It may not be possible to convert all existing ten year high schools into higher secondary in the near foreseeable future and introduce the vocational spectrum in the system. In the case of such ten year schools, the best course would be to improve their present structure and to reconstruct the curriculum and method of education and provide the needed infrastru-

ctural facilities for imparting practical science education needed for every day life and in acquiring knowledge and skills in one or two vocational courses, suited to the age and level of attainment of the learners, their aptitude and interest. This will satisfy the social need for trained middle level personnel for various minor and junior level jobs.

Taking down job-oriented education of class IX has the added advantage to providing wherever possible a four year integrated vocational course (i.e. IX to XII) which would equip the student with the high degree of knowledge and skill required for his work. Under Life Oriented Education a pupil would have already had the opportunity of getting intensive training in the basic skills at the primary and middle stages and this knowledge and exprience will be useful for building up competence.

4.23 TYPES OF COURSES

The LOE and vocational programmes at the secondary stage may be designed to train pupils for a specific occupation. The types of courses are :

- Commercial Art, drawing painting, sculpture
- Fine arts, music, dance, instrumental music
- Domestic science programmes for house keepers, Bakery, Confectionary help in school kitchen, boarding, hostel
- Co-operatives, canteens, stores, book shops, stationery shops etc.
- Commercial programme for typists, stenographers, accountants, bank clerks, book keepers
- Operators of simple office machines, computers
- Agriculture, Horticulture, social forestry pisciculture, Poultry, bee-keeping, dairy, sericulture workers
- Medical Programmes for auxiliaries such as assistant nurses, medical laboratory, Siddha, Homoeopathy technicians, X-ray, surgical and tool room operators
- Pre-primary or Balwadi Teacher and Nutritious meal organiser
- Textile works, spinning, weaving, dyeing, laundry
- Garment making, Tailoring, school uniform making
- Skilled workers for building trades-cement concrete, bricks - tile setting
- White washing works - Home, School community centres
- Mechanical repair trades, household electric appliances, transistor, Radio, TV, Mixie, Iron Gadgets of various kinds, watch, clock
- Electronic gadget maintenance
- Printing, book binding exercise, book manufacturing
- Operations in manufacturing and machine operations
- General machinists of various kinds
- Workers in wholesale or retail trade
- Helpers in beautification parlours, cosmetic, soap phenol. detergents, other household ware and hardware trades, Jewellery
- Auto mechanics

- Hotel and restaurant trades such as Receptionist, waiter, housekeeper, house steward, matron, recreation room assistants, beautician - kitchen supervisors, bell - boys
- Cinematography - helpers - Artists, advertisement Assistants
- Workers in transport, communication, postal telephone, telegraph
- Tourist office, guide, travel agent
- Operators in trains, buses, taxis, boats, aeroplanes
- Library and museum attenders, adult education workers help for school drop-outs, journalists.
- Fire service, police, security service assistants;
- Religious, Theology, temple and math scrvices
- Visit to hospitals, banks, farms, Industries, departmental stores and seeing the function was at work, artisans at work
- Scouting,, guiding, NSS, NCC
- Junior Red Cross and Health work
- Road Safety, First Aid and St John's Ambulance
- Prevention of diseases, pollution of water, air, environment
- Help to civic authorities
- Rendering assistance for nation building activites
- Road making, flood relief, cyclone relief
- Dramatisation. Enacting the life of national and local leaders, National Integration
- School organization in a democratic set up
- Temple, Temple tank, Road, Canal Slum renovation and cleaning
- Environmental cleanliness work to beautify the home and surroundings
- Involvement in Energy Generation programmes.

The list is only suggestive.

4.24. JUNIOR LEVEL COURSES

Wherever possible and feasible, services and from classes IX to XII may be planned. The assistance of experts may be designed and introduced, the courses in IX and X loading to a Junior Cetificate level and the courses in XI and XII to the Senior Certificate level at the end of class XII. The pupils should be acquainted with all the process involved in the production of goods and services.

4.25 VOCATIONALISATION OF HIGHER SECONDARY SCHOOL EDUCATION

Since 1978, Tamil Nadu Government has vacationalised education at the plus two stage in a massive way as a part of the efforts to provide meaningful education, leading to profitable employment opportunities at the appropriate levels and to link education with productivity and to make it more relevant to the requirements of our national development. The objective is to make students self-reliant and better equipped to take up various jobs. It is expected that a good proportion of the students who come out of higher secondary schools may not join traditional colleges if they are offered meaningful practical courses which will provide them avenues for (a) employment In various organixations requiring special skills (b) self-employment and (c) entrepreneurship.

A brief account of the on-going scheme of vocational education at the plus two stage is given in Annexure-I.

4.26 The success of the effort to vocationalise Higher Secondary Education would depend upon the initiative of the school authorities, the Institutional plans and choice of suitable courses, practical training, co-operation extended by the local community and the employer agencies both in the public and private sectors, changes in the recruitment policies and procedures and above all the efficiency of the practical training programme. Adequate facilities are needed for the vocational stream students to learn the practical aspects of the job function in order to supplement the academic knowledge possessed by them in the relevant subjects. In this context, providing **apprenticeship facilities** to the products of the vocational stream also assumes importance.

4.27 AUTONOMY

After enlisting the unflinching co-operation and understanding of the local community and the Parent - Teacher Association and careful choice of the vocational subjects, the success of the implementation work will depend upon the team work put in by the school authorities and soundness of the linkage established, the efficacy of the practical training and above all the support extended by the Government. A certain amount of autonomy may be given to the school authorities in monitoring the vocational educational programme.

4.28 VOCATIONAL SPECTRUM IN GENERAL EDUCATION

In order that general education students of higher secondary classes may also get experience in work and activity, they are required to take part in scouting, guiding NSS, NCC games and athletics and other vocational programmes according to interest and aptitude. They may also take active part in the promotion of national integration, adult literacy and adult education, in coaching school children, Dramatisation programmes, Organisation of exhibitions of historical value, gaining experience in the operation of, for example business machines, electronic and electrical apparatus, preparing hot water with the help of solar heat or energy, getting knowledge about alternate sources of energy, teaching how to get electricity from the water and steam, preparation of soap and washing soda, dyes, etc. demonstrating the method of purifying water, helping the farmers to get rid of the insect pest, learning methods of vegetative propogation, introducing modern techniques of raising kitchen garden, helping the people in environmental cleanliness and in socially useful activities. They may also take active part in poultry units and Bee-keeping and improving arts and crafts and pest control measures.

4.29 GENERAL GUIDELINES FOR DEVELOPING LIFE ORIENTED COURSES

It is expected thet the schools would develop a large range of courses, varying not only according to vocations practised in the area but also in terms of content and duration of teaching time. However, as they will form an integral part of the general system of education, they will have to conform to a set of general objectives. The following major objectives may serve as guidelines for heads of schools, teachers, PTAs and educational officers working on this programme, for developing new pre-vocational courses, for designing the evaluation and testing system and for drawing up orientation training for the Instructors.

4.30 (1) **The selection of suitable courses** is the most crucial factor because in most vocations and services not only it is impossible to teach the whole range of skills involved, but some will be inappropriate for the age level of pupils and at that stage of physical and mental development. Hence schools in consultation with parents and community leaders, will have to carefully decide on the course and the level of performance appropriate to the pupils.

4.31 (2) The process of development in every **productive work or productive service** should be reflected in the content of the course chosen It should cover such aspects as imagination, observation, discussion, experimentation, tool manipulation and production of goods or services

4.32 (3) Every activity to be chosen should be **need based** from the learner point of view or the community he is serving. In planning for them a **problem - solving approach** will be necessary where the problems are identified, discussions held for solving the problems and if necessary proper demonstration of work may be included to get the pupils acquainted with the various processes involved.

4 33 (4) The course should be so designed that pupils completing a four or five year programme in classes IV to X should **obtain the knowledge, skills and attitudes** to take part in selected manual skills related to the selected vocations with an appropriate degree of proficiency.

4.34 (5) The goal of vocational study is not confined to the acquisition of manual skills only. It necessarily involves the production of some article of value or the rendering of a useful service to society. This will depend upon a range of factors, such as the demand for certain products, the raw-materials, the tools and the equipment to be used, the process of production, marketing of the products and other geographical studies. To gain a good understanding of a vocation, pupils will have to study not only the above factors, but also the nature and significance of their interaction and interdependence. This will form **the theoretical body of knowledge** in vocational study.

4.35 (6) A **knowledge about the resources available** in the community and the vocations practised by the members of that community should ultimately lead to a greater understanding of the problems and potentialities of the community to which the pupils belong. Such an understanding could eventually establish closer and more fruitful relations between the pupils who leave school and the communities from which they came. This will make them better informed, critical in outlook and more skilful. Thus the pupils will be better equipped to make more rational decisions about their future. Furthermore, pupils will also be encouraged to recognise and respect the expertise available in their community and form favourable impressions of artisans and the practicioners of art. The development of a positive attitude towards productive work and an urge to create and innovate, should be the end results of their knowledge and understanding of the vocations.

4.36 (7) The studies should create an awareness that **knowledge gained in other subjects** such as mathematics, science, history, geography and civics can be applied in studying about the occupations and show the relevance of school learning to such important aspects of life as vocations practised in the community. The general principles and theories that pupils study will become more meaningful when applied

to the study of the socio-economic level of the practitioners of the art and trade, factors influencing the marketing of their products and the application of co-operatives and other means of satisfying wants.

4.37 (8) ROUND OFF COURSE

To many pupils in the middle stage the course of studies they are completing would be their only formal schooling; others who continue would have further opportunities for development within the formal school system. For both groups it is essential not only to acquire certain selected manual skills as stated above, but also to acquire a feeling of confidence and pride which would spring from the socially useful work or service they are engaged in.

4.38 (9) REVAMPING SCIENCE EDUCATION

In a world where Science holds the key to progress, education has to assume a dynamic role and has to become meaningful, purposeful, useful and relevant to life. Teaching of science has become more and more theoretical and getting away from the realities of ordinary life. It is, therefore, essential to evolve a new methodology of teaching science which will make the subject more interesting, more readily assimilable by the students and more practical in order to retain its relevance to the changing life situation. It has to be reoriented to help in solving problems of daily life.

The change sought to be introduced in the method of teaching science will seek to give a more practical bias to science teaching. It will also involve doing things with the hands by the student and this naturally develops greater interest and eliminates some of the passivity and boredom which are associated with the classroom situation.

In the new approach, the gap between the world of work and the world of learning is sought to be bridged. The study should stimulate thought and also serve to inculcate skills for improved action. This coordination between thought and action is sure to generate a two-way process resulting in improvement in both, whereas work will be improved with the application of knowledge, knowledge itself will benefit and become more purposeful and realistic when put to use in refining and improving action.

4.39 10. Life Oriented studies will be such that they must have **ramifications into other subject areas** and similarly other subject areas will have ramifications into the area of Life Oriented courses. These points of contact have to be worked out jointly by the teachers concerned. During actual teaching - learning, every subject teacher will have to relate knowledge belonging to his area to the LOE programme.

4.40 PRACTICAL TRAINING AND EARN-WHILE YOU LEARN

(a) FOUR DAYS OF STUDY AND TWO DAYS OF PRACTICAL WORK

At the Secondary and Higher secondary stages whenever courses are akin to those offered in polytechnics, ITIs, Nursing schools, Agricultural schools. Commercial schools initial years of the Engineering, Medical, Law, Agricultural, Veterinary and other professional courses, the infrastructural facilities and the services of teachers and instructors available in these institutions may be utilised for imparting practical knowledge for selected trades. Considerable flexibility should be permitted in

arranging practical training. For instance the school should adjust its hours of work so that for two days students will learn at workspot in realistic situations in these collaborating institutions. The institutions in turn should provide facilities in their workshops or laboratories or workspots for doing practical work to the vocational courses students on specified days.

Wherever Vocational students' services are utilised for involvement in production work, reasonable remuneration should be paid to them at rates decided by the District Committees.

4.41 (b) PART TIME WORK, PART TIME STUDY, CO-OPPERATIVE INTERNSHIP PLAN

The work-study programme for vocational students where alternate batches of students take for school studies and vocational practical training will be a major break through in organising the practical training programme in work situations with tee help of collaborating organisations. Under this scheme the learner earns while he learns and gains adequate experience in a realistic situation and at the same time progresses in generel courses.

4.42 (c) SCHOOL ADOPTION SCHEME FOR COMPUTER COURSES

Much can be said in favour of the School Adoption Scheme whereby well establisbed large institutions, industries and concerns may adopt one or two higher secondary schools in the area for imparting knowledge and skills to higher secondary students in the areas of their specialisation.

For example, the Government Data Centre, Guindy, the computer centres in the Engineering Colleges, Polytechnics and other organisations may each adopt a school for imparting skill in Computer Programming or Computer Maintenance. Likewise every professional College may adopt a higher secondary school and help to design new practical courses which will be useful to the pupils.

4.43 (d) FARM OPERATIONS TO BE DONE IN CAMPS

Some activities in Vocational studies like agriculture which have seasonal work may be organised outside school hours in special camps for weeks. Thereafter students may learn the theories and related subjects in school. Again after a spell at school, they may attend to agriculture and other farm work of productive nature. This may provide an opportunity to the learners to earn while they are learning. A school co-operative farm may prove ideal to attempt mixed farming.

4.44 (e) SANDWICH COURSES

Open Sandwich arrangement may be made by which theory and practice are provided alternatively in the first year in the school itself and jointly by the school and the industry or trade in the second year.

4.45 (f) SCHEDULED HOURS OF WORK

Wherever necessary, practicals may be assigned regular periods in the timetable. In other cases, practical work periods may be bunched, combining two or three periods or, if necessary, all the periods in a day.

Courses in typewriting, photography, spinning and weaving, book binding, music, dancing, painting, tailoring gardening, first aid, baking, cooking, and similar courses which require minimum equipment and can be done in special classrooms, fall under this category.

4.46 COURSES SUITED TO GIRLS

Since the school population consists of almost fifty percent girls the LOE and vocational courses selected should be such that they have practical value for their future as home makers. Under the Co-operative Internship Plan for training pre-primary school teachers, women students of the higher secondary schools who desire to take to courses in Nusery school, teaching may be gainfully employed in the nearby Balwadis for varying periods for practical training during each of the years and devote the school study for theory, psychology and methodology. At the successful end of the course they may be awarded diplomas and absorbed in the pre-primary school system.

4.47 THE INSTITUTIONAL PLAN FOR VOCATIONAL EDUCATION

Each institution has its own history, its own tradition, its own character, its own resources and above all, its own popularity in the society it serves. Institutional planning is advocated to make educational planning more realistic and implementable. It reverses the normal trend followed today where the direction of the planning is from the top to bottom. The character of each school plan will be distinctive where planning will be based on the principle of optimum utilisation of human and material resources available in the school and community. It is this community support and local resources that will be of immense value in planning for vocational courses best suited to the locality.

4.48 ROLE OF HEADMASTER, STAFF, STUDENTS, PARENTS AND PUBLIC:

1. Public relations programmes to get the support and positive attitudes of the Local community towards work education and vocational subjects.
2. Conducting local survey for the choice of vocational courses to be introduced in the school-
3. Getting ready appropriate syllabi of courses, instructional materials, equipment, farm facilities or workshop facilities with the help of local Community.
4. Selection of suitable part time vocational teachers of quality.
5. Enlisting the participation and cooperation of other educational and vocational institutions,Governmental agencies, business enterprises, factories and companies in providing both training and employment to the products.
6. Bringing about the co-ordination between the organisation that supply manpower and the organisations that demand manpower
7. Using community resources to the maximum extent possible.
8. Making budget provision to cover expenses for teacher's handbooks, equipment and consumable materials needed for the courses offered which will not be forthcoming from the locality:
9. Using locally available materials for instructional and practical purposes, wherever appropriate.
10. Inviting local personnel who posses expertise in fields related to vocational courses of studies to give lessons or practical demonstration to the students in areas of their particular interest;
11. Arranging fieldtrips for students and instructors to visit farms, firms,

laboratories, workshops, factories and business concerns.

12 Display of the students products regularly and selling them to the public during school fairs or annual exhibitions.

13. Encouraging the students to apply their skills and knowledge both inside and outside their schools.

14. Supply of minimum equipment and raw materials for demonstrations and practicals.

15. Providing career counselling services to students

16. Prescribing the various records to be maintained by pupils and instructors.

17. Arranging for supervision of vocational education.

18. Getting standardised vocational tests prepared by teachers or supervisors.

4.49. Arts and Craft Education in the past has suffered for want of suitable physical and personnel facilities. The present scheme needs careful monitoring, The programme being flexible adequate resources should be made available well before formulating them. Once having formulated it, it should be pursued vigorously.

4.50. Life Oriented Courses should serve as a tool of education. Mere acquisition of a certain skill for earning some money out of it is not the end purpose. While evaluating the programme, the educational outcomes and the desired behavioural changes will have to be considered. The programmes should be forward looking taking into account the needs of the individual society in this modern scientific age.

5

PILOT PROJECTS

5.0. PREPARATORY PLAN

The concept of Life Oriented Education was developed between September 1983 and February 1984 by holding fruitful discussions with teachers, administrators, practitioners of art and professionalists. The Chief Secretary to Government, Thiur. K. Chockalingam convened meeting of educationists, Secretaries and Heads of Development Departments and the Director of School Education to clarify the issues involved in drawing up the plans for the innovative scheme. Based on these disscussions, the Director of School Education drew up an Action Plan for the consideration of Government. The Action Plan was also communicated to selected schools to know their reaction. Taking into account the favourable response and eagerness on the part of some institutions to try out the Scheme, committees were constituted to update the general curriculum, including the sciences and to draw up the course materials for the Life Oriented Courses covering the 8 years of primary and middle stages and the vocational courses at the secondary stages. The Philosophy contained in the new approach, the integration of Life Oriented Education in the general school curiculum, the organisational aspects and implementation procedures were incorporated in a publication brought out by the Director of School Education entitled,

"SOME SUGGESTIONS FOR RESHAPING SCHOOL EDUCATION".

The Philosophy and approaches enunciated in the publication formed the material for the further discussions with the Chief Minister, Eudcation Minister and the Educationists and Departments concerned.

5.1 A GIGANTIC PROGRAMME:

The major issue related to the problems covering over 100 lakhs or 10 million pupils in the age-group 5 - 17, the availability of Instructors and practitioners of art and their orientation, the equipment and facilities to be provided and above all the huge cost involved in bringing the Scheme into operation and the phasing to be adopted.

A suggestion was made that the programme may be taken up by stages and in the meantime the syllabus and curriculam may be finalised and if possible to encourage some willing schools to make a trial according to convenience in 1984-85.

5.2 DECENTRALISED APPROACH

Ours is a highly centralised educational system where the curriculum, course of studies and the syllabi for school education are designed, developed and administered directly by the Department of School Education.

In making the curricular reforms for Life Oriented Education, a positive and significant departure had to be made from the traditional and centralised approach. There were few precedents and models to draw upon. The best out of the on-going programmes of Arts and Crafts, work experience, socially useful productive work and UNICEF assisted curriculam renewal programmes had to be drawn and some aspects suitably blending all the salient features in these Schemes had to be considered, The models adopted by the developed countries like UK, USSR, USA, JAPAN, FDR, GDR and China were also taken into account. Recommendations made by various commissions and committees and educational bodies like UNESCO and NCERT were perused to frame the new programme of Life Oriented Education.

As the base of all, educational planners and administrators. heads of schools and teachers had to reorient their thinking on a new social and educational philosophy, Public and parental acceptance of the Scheme had to be ensured. In all these matters Life Oriented Education had to be projected and considered as one area of the school instructional programme closely related to a person's future and his entry into specific vocations, in such a way that pupils will have the opportunity of learning among other co-curricular studies, about vocations and at the same time, acquiring professional skills relevant to their age, ability and aptitude and level of attainment. Hence heads of schools and teachers themselves were required to draw up suitable courses based on viable vocations practised in their respective communities with the assistance of experts and practitioners of trade in the area.

The rationale for this decentralised approach is that the vocational environment of the pupil is as much important as the physical biological and sociological environment. It was clearly felt that the success of the programme depended upon the degree of responsibility and autonomy exercised by heads of institutions and teachers at all stages, in the choice of subjects, preparation of the curriculam, procurement of materials, implementation of the scheme and evaluation.

5.3 SCHOOL INSTITUTIONAL PLAN

The objectives of the Scheme were spelt out for the information and guidance of schools and they were required to draw up institutional plans for the consideration of the Department. Secondary schools that were prepared to try out the Scheme in a limited area in Class VIII or IX or any other class were encouraged to plan for there implementation as a pilot scheme. Considerable autonomy was given to schools to design the implementation pattern and complete flexibility was permitted in designing the course, in fixing suitable working hours, procurement of raw materials and choice of instructors and practitioners of arts and knowfedgeable persons for teaching the subjects.

Each pilot institution drew up an institutional Plan of its own keeping in view the guidelines, its resources, the support from the community, the infrastructural facilities available and the needs of the locality.

The different stages and operational procedures adopted in implementing trial programme under the Scheme of Life Oriented Education in selected schools is detailed below :

5.4. STAGE 1

The year 1983-84 was a year of exploration and spade work as far as the

Chief Minister's Scheme of Life Oriented Education is concerned. The concept had to be developed to facilitate implementation. As a matter of policy life oriented courses were left to be designed and developed on vocations which are practised in the environment and the facilities available locally and therefore the choice of the subject had necessarily to lie with the school. A series of briefing sessions were held in all the districts for groups of heads of institutions (secondary schools) and educational administrators on the policies and plans governing the Scheme of Life Oriented Education in order to evolve the basic guidelines for implementing the Programme. The inspecting officials of the Department were also informed that the main criteria for the selection of a pilot school would be the presence of a Headmaster / Headmistress who had hitherto shown evidence of leadership qualities, imagination and courage in implementing curricular innovations and who could enlist the cooperation of his staff and the parents in embarking on a novel and pioneering venture. After the initial briefings and disscussions were concluded, these heads of institutions were requested to prepare a revised Institutional Plan broadly conforming to the Life Oriented Education concept. These schools were thus motivated to study their particular vocational environment and design, develop and implement a curricular programme based on suitable vocations practised by the community.

5.5. STAGE 2

A broad outline of the Scheme was spelt out in a demi-official letter of the Director of School Education addressed to all the Heads of High and Higher Secondary Schools in the State explaining the concept and inviting suggestions and proposals for implementation. During 1984-85 it was decided to try out the Scheme in schools which volunteered.

There were several issues which the implementing schools had to face:

In the current year 1984-85, the course had to be developed and worked out outside the normal curriculam (as the new curriculum covering all schools, all standards and all students had not yet come into operation in 1984-85, and this demanded extra work both from teachers and pupils.

Very limited time, less than 3 months only, was available to the schools to develop and commence the pilot programmes with the reopening of schools in June 1984.

The initial problem was to convince the Parent-Teacher Association and sell the idea to them and enlist their co-operation for trying this Scheme. Tne phasing of the Scheme and in which classes to commence first was left as an issue to be solved locally.

The choice of courses posed altogether a different problem as a survey of local occupations had to be made and only such courses as may be having local facilities could be tried. Availability of men, materials and money had to be assessed. Best and optimum use of special fee, amenity fee and Parent-Teacher Association funds had to be made without frithering away the resources.

The practical training had to be arranged in realistic work situation in farms, workshops and production centres or work conditions had to be created in schools. Selection of instructors and artisans who could do part-time work had to be made. Alternative models of time-table had to be

worked out. The existing Arts and Crafts and Hobbies were to be revived and activised to suit the new concept. Community and teacher involvement in all these matters was of utmost importance. Steps had to be taken to make the activities production oriented. Pupils had to be involved in creative work. The quality of work had to be ensured. Proper assessment and evaluation procedures had to be evolved. Public had to be educated about the utility of the Scheme. The media had to be associated for this purpose. The training had to be associated for this purpose. The training had to be of a standard acceptable to future employees or for embarking upon self-employment should the pupil leave the school without completing the high school course. There were major issues confronting the heads of schools and inspecting officers.

5.6 STAGE 3

In order to discuss all the issues and to spell out the strategies for implementation, **a workshop** was held for senior headmasters and inspecting officials at Coimbatore on the 28 and 29 May 1984, under the guidance of the Minister for Education. Some of the schools which has already initiated measures for implementing the Scheme invited the participants to go round and see their working. The following schools which had pioneered the movement acted as hosts in the venture:

(1) Kadri Mills Secondary School, Oddarpalayam,

(2) Sarvajana Higher Secondary School, Coimbatore,

(3) Swatantra Higher Secondary School, Athipalayam,

(4) Sri Avinashilingam Higher Secondary School for Girls, Coimbatore

During the visits the participants noticed the enthusiasm with which the pupils took to those practical activities. Some of them were engaged in productive work especially in the textile mills and were getting wages for their work under what may be called 'Earn while you learn' concept.

5.7 STAGE 4

Between June 1984 and September 1984, following the workshops at Coimbatore, district level workshops were held for Madurai, Ramnad, Tiruchy, Thanjavur, Pudukottai, North Arcot, South Arcot, Salem and Dharmapuri districts to evolve **the initial guidelines and the procedures** to be followed by the schools in organising the LOE studies. The summary of various recommendations made in these workshops has been annexed (annuxure III)

A printed material somewhat in the form of guidelines was developed on the basis of the experience of the pilot schools and embodied in a phamplet captioned as "CHIEF MINISTER'S SCHEME OF LIFE ORIENTED EDUCATION - PRINCIPLES, PLANS AND STRATEGIES FOR IMPLEMENTATION". This was distributed to all the Secondary and Higher Secondary Schools. This turned out to be an important communication device in developing, organizing and co-ordinating the LOE curriculum in the selected school system. A great deal of confidence and hope was placed in the leadership initiative and dedication to hard and innovative work of the Heads of Institutes, teachers and field staff of the Department.

5.8. STAGE 5

In spite of the multifarious hurdles and spade work involved, the selected schools developed programmes to the best of their

knowledge. No doubt the programmes were of varying quality, duration, organizational design and formats. **Supervision of the individual programmes** was carried through intensive school visits by the Chief Educational Officers, District Educational Officers and Inspectreses of Girls' School. Mid-course corrections were made mostiy through on-the-spot observations and discussions with the school authorities and others directly involved in the programme

The selected schools which had facilities to teach the traditional practical subjects such as Gardening, Sewing, Tailoring, wood work Metal work, Spinning, Weaning, Drawing, Painting, Music etc. continued to teach them in Class VIII under this programme, but following the revised approach with emphasis on productive and creative work.

The Department's intial move to explain the preliminary guidelines was spearheaded by the visits of the Education Minister, the Education Secretary, Vice Chancellors, Director of School Education, Additional and Joint Directors of School Education,SCERT personnel who visited the districts and personally participated in the Seminars held for Heads of institutions which were implementing the Scheme. These officers were also meeting many of the school heads, teachers and administrators and clarifying and elucidating the policy and objectives of the programme The Chief Educational Officers, District Educational Officers, Inspectresses of Girls' Schools and the field staff too continued to meet their head teachers and teachers frequently

The seminars were conducted, in order to familiarize the functionaries with the special role they would havo to play in the programme. The staff of SERT associated in the programme were involved in listing the issues commonly encountered in schools during the initial period. The medium of the press, film, radio, and TV was also used for publicising and popularising this Scheme. A Video presentation of the vocational courses in progress in the Higher Secondary School was prepared and screened for the benefit of the participants in the Scheme which proved useful and educative

5.9. STAGE 6

The programme was under way in the selected schools by October 1984. The feedback information received from the District Officers indicated that the quality of work and the pace of progress was good for our intial attempt but were uneven. This was not unexpected, cosidering the the severe constraints of the **situation. The** more enterprising groups had prepared new courses and materials while at the other extreme were those who, lacking expertise, took the path of easy work by resorting to common place handicraft-type of activities whic met partly the objectives of LOE.

The Heads of schools were requested to send Institutional Plans and copies of syllabi they had prepared for approval. In response, the Department received about **700 different Institutional Plans** from the schools during the long term of 1984-85. This was a satisfactory and an encouraging response, considering the novelty of the experiment (annexure-IV sample of school Reports).

5.10. STAGE 7

In November and December 1984, **a second spell of workshops** were held to identify issues and to give guidelines to the

implementing schools in the Districts of Tirunelveli, Kanyakumari, Periyar and The Nilgiris. Briefing sessions were also held in Chengalpattu and Madras for the guidance of the implementers.

It is proposed to bring out a comprehensive guide book on this subject for the use of pilot schools and others which will introduce the Scheme in 1985-86. The object of this is to disseminate information useful to teachers and field staff in organisational and curriculum development activities related to LOE.

It is expected that by the end of 1984-85, the majority of the secondary schools, if not all, would have selected their LOE courses and developed syllabi for them in accordance with the guidelines given. The next major step will be to classify and systematize these diverse syllabi to enable central coordination of the total programme and to facilitate evaluation. An analysis of the syllabi so far received showed that almost all of them covered certain productive and service occupations practised throughout the State except a few novel features adopted by enterprising schools. It may be possible to classify these syllabi by vocational areas.

5.11 STAGE 8

As explained above the study and the analysis indicate that the syllabi presented by different schools on the same vocational area showed **a great deal of diversity and variation** in terms of selected content. Though this could be encouraged at school level as a matter of policy, yet it would present other problems of central coordination and evaluation particularly in the matter of holding common examinations in these subjects at the end of Class VIII or end of Class X at the SSLC Examination. Therefore, it is found expedient to establish a certain degree of uniformity at least in the matter of common examination syllabi while giving the schools the freedom to modify, adopt or expand their own schemes of practical work at the same time keeping them within the broad frame-work demarcated by the end of the course. Moreover, a common syllabus will also provide not so-enterprising schools a basis to organize their own LOE programme in the school and bring it in line with the other schools in the area in due course.

It is, therefore, proposed to appoint special expert committees to analyse in detail a fair sample of syllabi that had been received and assess their standard. It is possible to identify such satisfactory syllabi in some of the classified subjects.

After the preliminary analysis of the syllabi it may be possible to prapare a Format that could be adopted in the drafting of examination syllabi for the SSLC stage. Copies of examination syllabi will be made available to the schools by the time LOE courses are introduced at the SSLC Stage. It is also necessary that the list of approved LOE syllabi should be revised periodically as and when the need arises.

5.12 STAGE 9

THE SCHEME OF EVALUATION

School level

Life Oriented Education and vocational courses will be compulsory **examination subjects** at the SSLC stage taken at the end of 10th Std. These examinations, like the other public examinations at Secondary level and Higher Secondary level will be the responsibility of the Department of Government Examinations.

The traditional paper and pencil test and the practical tests generally administered in public examinations are quite unsuitable for the evaluation of LOE courses. Each vocational study will have strong local bias which could vary from school to school and it may not be possible to test this aspect by means of a common examination. Manual skills are not easily or adequately tested by an end-of-course common examination. There is need for a system of continuous evaluation

Practical aspects of these aspects can be more satisfactorily evaluated at school level by the subject instructors themselves. For this reason, internal or school level evaluation of pupil achievement has to be included in the evaluation scheme. The final certificates that each pupil will receive for LOE and vocational studies at the Government examination will be a composite of the marks awarded by the school for his level of achievement in his respective courses together with the marks he obtains at the final written examination on the same vocational subjects.

State level Written Examination

Though LOE and vocational studies are not quite amenable to evaluation by public examination, they are to be included as public examination subjects for certain practical reasons. In spite of the shortcomings and even the ill-effects of a highly centralised and a rigid public examination system, pupils, parents and the wider society continue to place much faith in public examinations. Subjects that are assessed at public examinations are usually the ones that gain public acceptance and prestige. If LOE and vocational studies are not fitted into this system, very few people would give much attention to them, in spite of their high educational value.

Hence a State level written examination on LOE and vocational studies is not entirely out of place, when we consider the wide range of differences in school evaluations. Even in respect of a particular vocational study, these variations may occur due to a number of factors, such as, differences in experience and expertise in evaluation work, diversity and variety of evaluation procedures and techniques adopted by different schools, disparity in resources available in school for teaching etc. In this situation, a State level examination would provide not only the incentive for ensuring that a minimum level of teaching does occur in all schools but also that there is a certain dagree of standardization in the school level evaluations.

It will, therefore, be necessary to develop an evaluation instrument for each of the LOE and vocational studies by a Committee involving experts and teachers associated in the teaching of various subjects.

5.13. STAGE-10

EXAMINATION IN ARTS AND CRAFTS SUBJECTS

At present the Director of Govenment Examinations holds public examinations at two levels, lower and higher, involving theory and practical in such subjects as Music, Dance, Drawing, Painting, Agriculture, Weaving, Wood work. Metallurgy, Sewing, Needle work, Tailoring, Home Science. Printing, Composing, Proof Reading, Pharmacy, Compounding etc.

Schools may also follow the syllabus prescribed for these courses and present pupils for Lower level examination, if they had passed Std VIII or the Higher level examination after completing the Std X.

Govenment certificates will be issued to successful candidates which would help them in securing jobs.

5.14. STAGE 11

A further refinement in the organisational efforts will be to choose a few productive activities for which there will be continuous demand and huge consumption especially among the educational institutions themselves.

Examples of such school materials which will have bulk demand are making of chalk piece, blackboard and duster cloth, reed or coir mats, sitting planks, exercise books and file cases, brushes and brooms, pins and clips, soaps, phenol and detergents, leather bags and boxes, school uniforms, inner garments, decorative meterials and a variety of other consumable materials. Arrangements can also be made for ensuring the quality of the products and for their easy marketing through departmental or co-operarive efforts. School needs being multiple, it is expected that production and sale of such useful articles will be a money getter which will encourage the participating pupils and teachers if they are given a great share of the profits. In each educational district, a few schools may specialise in one or two items so that some of the essential school needs may be fully met. There will also be puplic support for this 'Earn while you learn' Scheme.

5.15. STAGE 12

Certification is an essential part of educational activity in any form. LOE courses of a practical nature should therefore culminate in public examination both in theory and practical and with extreme emphasis on practical. The Director of Government Examinations annually conduct examinations in various subjects both at the Lower level and Higher level. School candidates who attain certain proficiency in LOE subjects may well take these public tests. These certificates should be accepted by public services, commissions and employer agencies for appointment to relevant posts.

6

PROBLEMS AND PROPOSITIONS

The problems that any new project would encounter at every stage of its process are numerous and in the case of LOE it is particularly so due to its enormous scale of operation and the urgency with which it has to be accomplished.

6.1 PHASING

Phasing of the scheme, considering the fact that LOE will be an integral part of school education at all stages and will be covering nearly 38,000 schools (Primary and Secondary) and over 100 lakhs of pupils, the Scheme has to be introduced in a phased manner. Government may have to take an early decision on the manner of phasing to be adopted. The following phasing and preparatory work are recommended :

1984 - 85 — Preparatory work

— Pilot projects in slected secondary schools

1985 - 86 — Class VIII or IX of all Secondary Schools

— Training of teachers of Primary and Middle schools

— Advance supply of equipment and tools

1986 - 87 — Classes I, II, III, VI, IX or X

1987 - 88 — Classes IV and VII of Elementary and Middle Schools

1988 - 89 — Classess V and VIII of Elementary and Middle Schools

N. B : (a) The training of about 2 lakhs of teachers may be done in phases during 1985 - 86, 1986 - 87 and 1987 - 88;

b) The tools and simple equipment are to be manufactured in bulk during 1985 - 86 and 1986 - 87 and distributed to schools in advance.

6.2 TEACHER PREPARATION

The most difficult area in the effisient implementation of the LOE programme lies in the teaching force itself. The programme will call upon the majority of the teachers to play a novel and active role especially in the primary stage. In the selection of need based course, some of the new functions such as conducting surveys on the vocational structure of the community, developing new curricular designs, materials, teaching techniqnes and testing instru. ments etc call for professional knowledge and expertise of a type not normally brought into play in traditional teaching programmes. Adequate amount of effort and funds are needed for organising inservice programmes for teachers.

6.3 RESOURCE MATERIALS FOR LOE VOCATIONAL TEACHER

Another major issue that LOE teachers have to face in their day-to-day work is the lack of published guide books or resource materials, particularly on the theoretical aspects or vocations. Whatever knowledge and expertise are availble are to be found in the persons who are engaged in the various occupations. While recognising the fact that it is a commendable practice to learn directly from the artisans and practitioners of art in actual practice, this may not be practicable for all taachers, all the time. Hence, the need arises for the preparation and documentation of scientific and technical information on the various LOE subjects. Expert education Committees are to be set up in order to develop resource materials for teachers on certain aspects of LOE subjects.

6.4 INFRASTRUCTURAL FACILITIES

Another problem is the inadequate availability of physical fecilities and equipment for many of the LOE studies. Despite the fact that in the case of schools which volunteered to try out the Scheme in selected courses during 1984-85, the Department has been permitting non-government funds such as special fee and amenities fee accumulations and parent Teacher Association funds to be utilised for the purpose and thereby encouraging schools to move towards self reliance and self sufficiency, a fair number of schools do not yet appear to have changed their traditional attitude of depending entirely on Government support. However, it must also be stated that a good number of enterprising schools have been able to make adequate provision through local initiative and support. But it may not be realistic to assume that this would be possible in all parts of the State in respect of all schools. Under the circumstances it is likely that a fair number of schools might be forced to slow down their programme to suit the facilities they have. The present efforts towards improvisation of equipment and materials at the local level are no doubt highly commendable, but the limitations also have to be taken into account realistically.

6.5 AGRICULTURE

Agriculture and its subsidiary occupations being the main concern of over three-fourths of our population and as agricultural production is vital for our economic growth, the school system should provide for adequate development of agricultural skills so that at the end of the course, young farmers may take to agriculture with more confidence and knowledge of new techniques. The training and practice in agriculture should be largely provided in the field so that the students would have opportunity to work and study under realistic conditions This necessitates the establishment of school farms for which land has to be assigned to introduce mixed farming or cooperative farming and in limited areas school kitchen gardening

6.6 **Social forestry** is a new are a gaining economic importance and schools can play a prominent role in aforestation if land and road fronts are assigned to them.

6.7 **Health services** are yet to reach all parts of the State and the need is for those trained in First Aid, St John's Ambulance and para medical works. School pupils will require training facilities to prepare them for this type of work Similarly the Bharat Scouts and Guides and the Indian Red

Cross (IRC) groups may be exposed to such training to be of service to people.

6.8 The **new industries computer tachniques trade and commerce** that are developing require a large number of skilled workers at the middle or junior levels and they should be available only through a well planned system of job oriented education at the school stage, where the perspective employees should be on practical training. This would help the school leavers to embark-upon entrepreneural efforts or to establish cottage industries or consultancy service of their own or think in terms of self-employment. The secondary school should therefore be encouraged to start new type of courses required to meet the demand of specialised manpower, not provided normally in ITIs or polytechnics. The establishment of school workshops or Common workshops will be an expensive proposition, but it is worthwhile and may be assigned priority in implementation. Likewise training in the handling of computers and Business machines will be of vital importance to our pupils.

6.9 **The co-operation** of various departments of Government and linkage with farms, firms, factories, production centres and service centres would prove invaluable for imparting practical training on a mutually agreed basis. Arrangments for such inter-departmental co-operation is of special significance

6.10. **Home craft** being a must for both boys and girls alike scope for developing the elementary skills needed for everyday life should find a place in the school system.

6.11. STATE COMMITTEE ON LOE AND VOCATIONAL EDUCATION

The Government will have to set up the State Committee on LOE and vocational Education under the chairmanship of the Chief Secretary to Government and with the Education and all other Secretaries to Government, Director of School Education, Director of Technical Education, Director of Medical Education, Director of Health Services, Director of Industries, Director of Agriculture, Chief Inspector of Factories, Director of Labour and Director of Employment as official members and other non-official members representing the nationalised banks, financial institutions, Universities, Chambers of Commerce, Public and Private sector undertakings under the Central and State Governments etc.

The functions of the Committee shall be policy-making, guidance for survey, choice of vocational courses, allocation of courses to specified areas, issue of directions to District Committees, Departments and organizations for proper implementation of the Scheme, maintenance of standards, giving guidance for arranging practical training in work situations, determining the equivalence of the vocational courses, establishing contacts with chambers of trade, commerce, industry and business, according recognition to courses for recruitment to various jobs and bringing about co-ordination among different agencies concerned with vocationalisation and for forging linkage with school. Frequent meetings may be held in the initial stages so that the Scheme may be set on foot properly.

6.12. DISTRICT LOE AND VOCATIONAL COMMITTEE

District LOE and Vocational Committees may be formed in every district with the

Collector as chairman and the Chief Educational Officer as Secretary and the collaborating District Departmental Heads and representatives of public and private sector undertakings as members. It will be the responsibility of the District Committee to arrange with the Departments concerned, (1) to survey the job openings, (2) to arrange to select suitable courses and even arrange to design new courses for each school without much duplication, (3) to locate and utilise the services of local artisans, (4) to arrange for part-time instructors from farms, firms, factories, Government departments and business houses as required by the Headmasters, (5) to review the practical work done in workshops and farms and (6) to periodically evaluate the programme. This will be a functional committee, which will actively involve in the operational aspects of the vocational courses through the help of the departments or agencies concerned. The success of the vocational programme will depend very much upon the active participation of this District level Committee and on their frequent meetings Government may also issue orders to all departments to permit, their qualified personnel, to accept part-time instructor's work in the school and for imparting practical training to pupils in realistic conditions in their production centres.

6 13, THE SCHOOL COMMITTEE

At the school level, the parent Teacher Association committee will have to be formed immediately and if already formed, will have to be activised, as their direct involvement in the school plan will be of special significance for the successful implementation of the scheme of vocationlisation. Their major role will be to draw up an institutional plan for the school, encouraging students to take to LOE and vocational courses and to establish linkage with the local production centres where practical training will be imparted. A certain amount of flexibility will be necessary in arranging the practical training and the local community should lend support to this idea, instead of insisting on the rigid, conventional school schedule. Parents will have to send their children to work-spots and work-situations and cannot expect everything to be done in the school premises. The school committee shall function as the catalytic agent for publicising the values of Life Oriented and Vocational Education and for siphoning off a sizable number to these courses at the Higher Secondary stage.

7

PERSONNEL AND ADMINISTRATION

An effective monitoring system is of vital importance for implementing LOE.

7.1. VIABLE CLASS STRENGTH

A viable class size at the primary stage wll be conducive for imparting knowledge and manipulative skills to pupils. Upgrading of single teacher schools and bifurcation of large elementary school classes will require prior attention before the Life Oriented Education courses are introduced. About 2 lakhs of teachers of this stage will need orientation and training. At the pre-primary stage, a teacher-pupil ratio of 1:35 will have to be adopted by appointing suitable trained pre-school teachers in the existing child welfare centres. At the middle school stage competent instructors and practitioners of art will be needed for each of the trades introduced.

7.2. **Records:**

In primary and middle schools where Life Oriented Education will be mainly of the productive and creative type practised in classrooms or adjacent centres of activity, teachers will maintain a simple record of work done for each pupil. They will submit a consolidated monthly report to the Deputy Inspector of Schools through the Head Teacher. In view of the changed hours of work, part-time craft teacher may be made full-time wherever work-load warrants.

7.3. CAREER MASTERS AND VOCATIONAL INSTRUCTORS

Every secondary and higher secondary school will have to be given a post of Career Master in the grade of post-graduate teacher with clerical assistance, who should take full responsibility for career guidance and for drawing up the plans for the practical training and for maintenance of pupils, records with the co-operation of instructors, one of whom may be on a full-time basis. The Carrer Master should send periodical reports on the working of the vocational courses and the pupils' progress therein to the inspecting officer concerned.

7.4. HEAD TEACHERS:

The heads of institutions themselves will be authorised to appoint part-time instructors who satisfy the qualifications and are within 62 years of age. The Headmaster will also choose a suitable Career Master who will assist him in the challenging work.

7.5 DEPUTY INSPECTOR OF SCHOOLS

The Deputy Inspector of Schools shall review the reports received from each school, individually for each class and while doing so he will give constructive suggestions for improvement. For this purpose, a clerk-cum-typist will have to be sanctioned for each Deputy Inspector's Office.

7.6 DISTRICT EDUCATIONAL OFFICER

The District Educational Officer or the inspecting officer concerned should review the reports received from each high/higher secondary school and give guidance for improvement. The office machinery should be strengthened for this purpose. The staff needs are a Vocational Officer and an Assistant for each office.

7.7. CHIEF EDUCATIONAL OFFICER

The Chief Educational Officer will be the Secretary of the District Vocational Committee who will have major responsibility in co-ordinating the work with the various departments, organisations and institutions. Competent personnel may be appointed (a) as District Vocational Officers for field work, (b) a Personal Assistant to the Chief Educational Officer, non-technical, for office work relating to vocational education and (c) Clerical staff for preparing reports and reviews

7.8 DIRECTOR OF SCHOOL EDUCATION & SCERT

The administrative units in the Directorate of School Education and the curriculum units in the SCERT should be geared to meet the challenges of the Scheme. To provide expertise and guidance in LOE and Vocational Education, Special Deputy Directors should be employed in the Directorate for each of the subject areas like, Engineering, Agriculture, Commerce and Business, Health, Home Science and Service Trades. These should be technically qualified in the relevant areas and taken on loan from the government departments concerned, Both the technical, personnel and administrative staff needed should be sanctioned on a priority basis. The staff needs are (a) six Deputy Directors of Vocational Education, one for each area of subject, (b) six non-technical Personal Assitsants to assist in office work and (C) supporting staff. In the SCERT at least two divisions will have to be created for arranging orientation courses, evaluating the programmes, reviewing the reports from districts and compiling State level data relating to LOE and vocational courses. Choice of competent personnel will be crucial for operating this massive programme.

8

PROVISION OF FUNDS

8 1. TOWARDS SELF-SUFFICIENCY
Size of the scheme

The expenditure on Education is about the highest in the State at present. No doubt implementation of LOE and vocational courses will constitute a huge cost to the State and in the initial stages this is unavoidable. It is estimated that the Scheme to cover 38,000 schools and 100 lakhs (10 million) pupils for a period of 5 years will be of the order of Rs. 1000 crores towards the training of teachers, provision of tools, materials and equipment, production of guide materials, establishment of laboratories, tool rooms, workshops and farms.

8.2. However, in due course we may pursue a policy that will require that schools to move towards self-sufficiency and self-reliance, especially with regard to the supply of simple equipment, tools and raw materials. The schools will have to find ways and means of harnessing the resources available in their community. From the working of the pilot scheme it may be said that wherever it has been possible to achieve greater community participation in the programme, the schools have been able to reach at least a fair degree of self-sufficiency in respect of material resources. Besides this, it is also expected that the income from the sale of marketable goods, produced under the programme in the school, would also offset part of the expenditure incurred. Schools which have subjects such as agriculture, kitchen gardening, carpentry, leather box and case making, coir work, paper and note books manufacturing, ink, cosmetics, soap making, dress making etc. will prove to be a paying proposition in a short period.

8.3. Equipment Cost. In most insfitutions self-sufficiency may be achieved only over a period of time. Government may have to allocate the needed finance immediately for the supply of minimum equipment and raw materials needed so that the Scheme of LOE and vocational programmes may start functioning in all schools within a short span of time. Hence the desirability of introducing a planned and a phased programme for the supply of equipment to school merits consideration. A standard list of tools, equipment and materials necessary for the different courses has been prepared with the help of artisans, technicians and practising teachers. Government may set up corporations and co-operatives to manufacture and supply in bulk the various material needs of schools. Advance action for making initial supply of these materials will encourage schools to launch the scheme effectively from the very start.

8.4. School Complex. Till such time equipment, tools and facilities are provided

in full scale to all the institutions. It is recommended that the school complex idea suggested by the Education Commission is adopted as it would break down the isolation between schools. "In our country where resources are scarce, it would not be possible for a long time to come to equip every school adequately. A well equipped school should share its staff and facilities with its neighbouring schools. This would indeed help to solve the problem of ill-equipped primary and upper primary schools to a great extent."

8.5. This suggestion would merit deep consideration as an immediate solution to problems of sufficient facilities for imparting training. Hence to begin with schools of central location may be strengthened.

8.6. THE COST OF THE PROJECT IS APPENDED

JOB ORIENTED COURSES

(ESTIMATE OF COST FOR 5 YEARS)

Stage	Preliminary			I Year			II Year			III Year			IV Year			Total			Grand
	R	N.R.	C	R	N.R.	C	R	N.R.	C.	R.	N.R.	C.	R.	N.R.	C.	R.	N.R.	C.	Total
A	7.64	4.62	38.23	4.59	1.95	28.75	6.03	1.95		7.47	1.60	—	8.91	0.20	—	34.64	10.32	66.98	111.94
B	—	18.20	26.74	19.78	11.09	23.00	23.90	20.43		24.26	1.88	—	24.38	1.00	—	92.32	52.60	49.74	194.66
C	—	17.50	—	6.52	18.85	73.50	15.29	1.70	52.1	16.35	—	—	15.35	—	—	53.51	38.05	125.60	217.16
D	17.30	18.50	30.36	20.54	21.00	27.32	23.54	23.50	—	26.54	21.00	—	27.54	24.00	—	115.46	108.00	57.68	281.14
E	1.62	0.71	—	2.87	—	—	2.87	—	—	2.87	—	—	2.87	—	—	13.10	0.71	—	13.81
T	**26.56**	**59.53**	**95.33**	**54.30**	**52.89**	**152.57**	**71.63**	**47.58**	**52.10**	**77.49**	**24.48**	**—**	**79.05**	**25.20**	**—**	**309.03**	**209.68**	**300.00**	**818.71**

N.B. R-Recurring ; N.R. - Non-Recurring ; C - Capital
A - Elementary ; B - Middle ; C - Secondary ; D - Higher Secondary
E - Administration ; T - Total

School Education	818.71
Social Welfare	10.61
Technical Education	50.00
Grand Total :	**879.32**

NOTE : The expenditure is mainly on the following items :-

Pre-Primary :- Training of Bala Sevikas, Play materials and equipment.

Primary :- Upgrading single teacher schools, Orientation of teachers, supply of equipment, tools and raw-materials and Craft sheds

Secondary :- Instructors for job-oriented courses, establishment of farms and workshops, equipment and raw-materials and buildings for workshops.

Higher Secondary : Remuneration of part-time and full-time vocational instructors, career and guidance teachers, farms and workshops, equipment and raw-materials, incentives, seed money for entrepreneurship, supervision, administration and evaluation.

LIFE ORIENTED EDUCATION LADDER

Age		Stage
25 & above	Doctorate level	UNIVERSITY
23-25	Post Graduate level	
17-23	Graduate level	
15-17	**Higher Secondary level** **General** 1. Languages 20% 2. Any four optionals, of which one will be vocational subject, Physical and Moral Education 80% Polytechnics, ITIs **Vocational** 1. Languages 20% 2. Vocational subject with practical trg. and study of one or two related subjects and Moral Education 80% Intensive practical trg. in realistic situation Nursing, Teacher Training, Jr. level professional training	HIGHER SECONDARY
14-15	1. Tamil or Mother tongue & English ... ... 35% 2. Maths., Sci., His., Geo. & Moral Edn. ... ... 45% 3. Vocational study & Physical Edn. ... ... 20% Life Oriented Education for all & Nutritious Meals	SECONDARY
10-14	1. Tamil or Mother tongue & English ... ... 35% 2. Maths., Sci., His., Geo. & Moral Edn. ... ... 40% 3. Life Oriented Edn - Arts, Crafts, Social Trg., Pre-Vocational Trg. & Phy. Edn. ... ... 25% Nutritious Meals for all	MIDDLE
5-10	1. Tamil or Mother tongue & English ... ... 35% 2. Maths., Sci., His., Geo. & Moral Edn. ... ... 40% 3. Life Oriented Edn. - Arts, Crafts, Social Trg, Manipulative skills & Physical Edn. ... ... 25% Nutritious Meals for all	PRIMARY
3-5	1. Habit formation-Recreation-Group games 2. Oral language skills-Tamil from first year English conversation from the second year 3. Play-way methods-Music. Dance & Hand work Nutritious Meals for all	PRE-PRIMARY

ANNEXURE - 1

Vocational Education at the Plus Two Stage

1. From June 1978, Tamil Nadu adopted the new pattern of 10 + 2 for school and College Education. In that year the two year Higher Secondary Course forming the upper crest of 912 schools, extended this level of education, evenly to all parts of the state, replacing the Pre-University courses provided in 188 colleges, most of them located in urban and Semi-urban areas.

TWO STREAMS :

2. At the higher secondary stage two distinctive streams are introduced, the general education spectrum preparing students for advanced education in the Universities and the professional colleges and the vocational spectrum preparing students for a variety of middle level occupations.

3. The course of studies for the two streams has been so framed that the student of general education would do two languages, one of which will be English and a combination of four subjects of Arts, or Science of inter disciplinary nature. The students in the vocational group would do the same two languages and one or two subjects related to the vocational course and the remaining part of the time will be devoted to the study of the selected vocational subject. Tamil is mainly the medium of instruction with provision for English, Telugu, Malayalam, Kannada and Urudu. Free education has been extended to all, except those who opt for English medium.

4. The two year stage between the School and the University is now regarded not merely as college preparatory but as a period for preparing an increasingly larger number of school leavers for different vocations.

KOTHARI COMMISSION :

5. According to the Kothari Commission, with proper planning, co-operation, co-ordination and implementation of the scheme of vocationalisation, it should be possible to divert atleast 50 percent of the students who successfully complete 10 year education to the vocational stream, thus reducing the pressure on the Univerities on the one hand and preparing the students for gainful employment including self-employment on the other.

In planning for vocationalisation of Education at the plus two stage the recommendations of the Kothari Commission and the Adiseshaiah Committee were taken for guidance.

VOCATIONAL SURVEY

6. Vocationalisation of education at the plus two stage may be considered a major breakthrough in the reconstruction of secondary education in Tamil Nadu. Initially occupational surveys were conducted in all the Districts with a view to identifying the manpower needs, demand for new skills, the emerging industrial, agricultural, commercial and trade development, the facilities available for training and the areas for self-employment opportunities.

SIX VOCATIONAL AREAS :

7. Six major vocational areas viz, (i) Agriculture (ii) Engineering and Technology (iii) Medical and Health Services (iv) Business and Commerce, (v) Home Science and (vi) Miscellaneous courses were identified. The following vocational subjects are approved under each occupational area.

I. AGRICULTURE

1. Dairying
2. Poultry
3. Small Farm Management
4. Farm Machanic and Post Harvest Technology
5. Agro-based Industries
6. Rural Construction Technology & Soil Conservation
7. Sericulture and Apriculture
8. Plant Protection (Pests, Disease and needs)
9. Vegetables and Fruits
10. Floriculture and Medicinal plants
11. Agricultural chemicals
12. Crop production
13. Spices and plantation crops
14. Fisheries

II. HOME SCIENCE :

15. Food preservation
16. Baking and Confectionery
17. Catering
18. Dietetics, Nutrition and Food preparation.
19. Interior Decoration
20. Dress designing and making
21. Designing, Dyeing and printing
22. Textile and designs
23. Child welfare and Nutrition

III. COMMERCE AND BUSINESS

24. Office Secretaryship
25. Insurance
26. Accountancy and Auditing
27. Banking Assistant
28. International Trade
29. Marketing and Salesmanship
30. Materials management
31. Business Management for small scale Industries.
32. Co-operative Management.

IV. ENGINEERING AND TECHNOLOGY

33. Building Maintenance
34. Electrical, Domestic Appliances - Repairs and Maintenance
35. Domestic Electronic Equipment/Projection Equipment servicing and Maintenance.
36. Radio and Television - Maintenance and repairs
37. General Machinist
38. Electrical Motor Rewinding
39. Textile Technology
40. Leather Technology
41. Maintenance and Servicing of Textile Machinery
42. Foundry Technology
43. Knitting Technology
44. Printing and Composing Technology
45. Business Machines and Computer Programming
46. Maintenance and Servicing of Electrical Machines including Generators.

V. HEALTH (FOUNDATION SCIENCES)

47. Medical Laboratory Assistant
48. EEC-ECG Audiometry
49. Ophthalmic Technician
50. Dental Mechanic
51. Dental Hygienists
52. Radiological Assistants
53. Nursing course
54. Hospital House keeping

VI. MISCELLANEOUS COURSES :

55. Music
56. Bharata Natyam
57. Drawing and Painting
58. Tourist Guide
59. Photography
60. Advocate's Assistant
61. Cotton Classifier
62. Nutritious Meal Organiser
63. Pre-Primary teacher.

8. SYLLABUS

Experts, connected with each vocation such as Engineers, Doctors, Lawyers, Judges, Farm Specialists, Home Science specialists

Commercial Instructors, Banking Co-operators, Industrialists and Music, Dance and Art exponents drawn from Institutions and Departmental organisations were associated in the preparation of the syllabus and course of study. In all the courses emphasis was laid on practical work.

9. INFRASTRUCTURAL FACILITIES :

Considering the high cost of machinery and equipment and the changing pattern of vocations, it was considered that substantial hardware and permanent facilities should be created only for those vocations which would have a longer span of life. For others, it was decided, as far as possible, existing facilities in educational institutions or other organisations could be utilised.

10. INSTRUCTORS :

Likewise it was decided that full time instructors may not be appointed as the same course may not be continued beyond a period of time in the same school or locality. It was felt that appointments and transfers of instructors on a regular basis may create a problem. Hence instructors are being appointed on a part-time basis from amongst those who have expertise in the vocations concerned. The expertise and facilities available in the institutions belonging to different departments of the Government, public enterprises and private organisations are harnessed so that training can be imparted in realistic conditions and at the same time the cost of vocationalisation may be kept down. In fact, several public and private sector industries and undertakings are associated with the vocational programmes introduced in the area schools. Another reason for taking the services of part-time instructors on a consolidated monthly pay is, it was considered that the object of these vocational courses will be better served if suitable persons working in the field in the locality are made available to handle both theory and practical classes on part-time basis. Hence permission was also accorded for holding the classes in the place of normal work of the part-time instructor such as banks, factories, farms, industries hospitals, Primary Health Centres, private organisations etc. Except the 400 and odd full time instructors of the erstwhile bifurcated courses the other 4000 and odd instructors are taken on a part-time basis.

11. ORGANISATION :

The implementation of the vocational scheme was left to the local Headmasters, teachers, the Parent-Teacher Association and the Vocational Committees formed for each school. The Heads of Schools were permitted to adopt suitable working hours for imparting practical training in collaboration with the training agencies and full freedom and flexibility are given in the organisational aspects. The Headmasters are also permitted to change the vocational subjects depending upon the job market with advance intimation. Internal assessment has been introduced to assess the involvement of pupils in the vocational practicals. It is expected that by the involvement of experts in the field not only the latest practices in the trade will be imparted but also through their influence regular on - the - job training can be arranged which may even ensure employment to the students under the collaborative arrangement. The minimum qualifications of instructors for each subject were notified and the Heads of Institutions were themselves authorised to appoint persons possessing the qualifications. In special circumstances persons with lesser qualifications were permitted if they were otherwise experienced. Government also authorised all the Heads of Departments, Government undertakings' Corporations, etc. to permit their staff to serve as Part-time Instructors and to receive the remuneration allowed.

12. VOCATIONAL MONITORS :

To assist the vocational instructors, student "Vocational Monitors" are nominated on the "Earn While You Learn" Principle. Two vocational Monitors are permitted for each course - one for the first year class and the other for the second year class,

13. VOCATIONAL EDUCATION FOR GENERAL EDUCATION STUDENTS:

In order that all Higher Secondary pupils may be exposed to work orientation, the pupils offering the general course have been permitted to offer computer science, electronics, stenography etc., as a fourth optional in lieu of an academic subject. This comes into force from 1984-85.

14. LINKAGE

The Tamil Nadu Programme has provision for attaching the vocational courses with the industries, factories, banks, farms, hospitals etc. to make the course fruitful. All leading industrialists and Chambers of Commerce have given their support in the matter of linking vocational education with industries and commerce and a fair degree of success has been achieved in forging a linkage.

15. COMMITTEES

A district committee on vocational education has been formed in every district with the District Collector as Chairman, the Chief Educational Officer as Convener and the District Officers in the Departments of Agriculture, Public Health, Industries and Commerce and Employment and Training as members to guide in the task of linking education with job. This has to be stablised further to make its functioning effective.

16. ORIENTATION COURSE

It was considered necessary that the Heads of Higher Secondary schools having vocational courses should be given orientation training to enable them to tackle the challenging task. With a view to orientating the teachers of vocational courses, NCERT, New Delhi organized summer institutes each of 21 days' duration ; SCERT, Tamilnadu also plays a significant role in organizing orientation courses, induction courses and in service training programmes to Higher Secondary teachers and instructors.

17. GUIDE BOOKS

In the initial stages, suitable publications were procured from other Departments and Institutions where similar courses or allied courses are conducted and adopted by teachers and students for consultation and study. Simultaneously knowledgeable authors were invited to write well illustrated vocational Guide Books in clear and simple language with authentic practical details keeping the local conditions in view. Guide Books have been supplied to teachers free of cost to guide them in the method of instruction. So far 105 guide books have been published covering 48 vocational subjects.

18. SPECIAL VOCATIONAL EDUCATION TRAINING SCHEME (SVETS)

There is a demand for giving apprenticeship training facilities to students with the cooperation of the related departments and organisations. To obviate the difficulties encounttered now necessary measures to bring the vocational students under the purview of the Apprenticeship Act are being worked out by the Ministry concerned in the Government of India. In the meantime the Union Ministry of Education has offered 1300 scholarships during 1983-84 for providing six months' training to vocational students in selected trades, which is operated by the Director of Apprenticeship Training, Southern Region, Madras. The rate of scholarship is Rs. 200/- p.m.

19. VERTICAL MOBILITY

The vocationalisation of education at +2 stage is being so structured as to make it both terminal and continuing. The aspirations of the students for better positions on the employment market has been taken into account and now the system permits them to secure further qualification for vertical and horizontal mobi-

The occupational area-wise distribution of students who have offered vocational courses in the past Six years is as follows :-

HIGHER SECONDARY EXAMINATION - II YEAR

	1980	1981	1982	1983	1984	1985
Total No. of candidates Registered for the Higher Secondary Examination - both General & Vocational	1,18,084	1,23,757	1,30,389	1,42,729	1,32,154	—
No. of candidates Registered for Vocational Subjects						
1. Agriculture	2,910	1,979	2,476	2,237	1,916	1,940
2. Home Science	1,543	1,616	1,398	1,463	1,000	1,091
3. Commerce & Business Management	11,574	12,914	14,777	16,037	13,547	21,573
4. Engineering & Technology	6,877	6,201	7,287	8,437	7,735	8,202
5. Health	1,580	2,610	2,078	2,242	1,710	1,688
6. Miscellaneous (Photography, Tourism, Bharatha Natyam)	60	55	48	45	32	51
Technical Schools						522
Total	**24,544**	**25 375**	**28,064**	**30,461**	**25,940**	**35,067**

The figures above represent the student strength in the 2nd year of the +2 course i.e. Std. XII.

An equal number have offered Vocational courses in the first year of the course i.e. Std. XI.

lity whenever they desire or opportunities occur. The objective is that a majority of the students of the vocational courses should enter into the world of work either through self-employment or taking up a job. However, for those who wish to continue and improve their quaifications, there is provision for allowing them admission in the following technical and professional institutions provided they fulfil the admission norms :

1. Engineering Colleges,
2. 2nd year of Polytechnic (10% of seats)
3. Agriculture and Veterinary courses
4. MBBS and BDS and Siddha courses
5. Vocational students of "Nursing" in the B.Sc. (Nursing) in the 2nd year.

Similarly universities permit students of vocational courses to pursue higher studies by suitably offering subjects studied by them in relation to the vocational courses. They may also appear for an additional subjects outside school hours and with the open university and correspondence system they have no restriction for pursuing courses in Arts, Commerce and Science.

20. GUIDANCE AND COUNSELLING

To help the students to make judicious selection of vocational courses, it is considered desirable to provide guidance and counselling for careers and courses to the students. This is still in the proposal stage.

21. STATISTICS:

Vocational courses have been started in almost all the 1,370 schools in the State. As many as 2,000 courses are in operation in the State in 1984-85.

ANNEXURE - 2

Curricular Material For LOE - Synopsis

Courses covered :

(i) Physical Education (for all)
The graded syllabus for Classes I to XII prepared separately.

(ii) Moral Education (for all)
The graded syllabus prepared separately for Classes I to XII.

(iii) Social Training (for all)

(iv) Music

(v) Dance

(vi) Fine and Applied Art

(vii) Agriculture and Animal Husbandry

(viii) Health

(ix) Home Science

(x) Engineering and Technology

(xi) Commerce and Business

(xii) Computer Science

SOCIAL EDUCATION AND TRAINING

The organisation of the school community for carrying out the activities of the Scheme :

School Assembly - General Assembly for prayer and announcements - National flag - National songs - The National Anthem - Origin of our National Anthem - National heroes - National Integration - World Citizenship - UNO - WHO - IMF - UNESCO - UNICEF - Nobel Prizes - Nehru Peace Prize.

General knowledge - Training in leadership - First Aid - Ambulance Brigade - Rescue from road traffic accidents - Lay nursing - Observation memory and sense training.

Social responsibility - Care of Property - school Property - Public Property, Property of the state and the Nation - Prevention of damage to property - Respecting the property of others - Co-operation in the activities for common good in the area - Respecting the rights of others in buses, trains and public places - Being punctual helps the individual as well as the society - check up of school property - their own class first - Insisting upon punctuality in all activities, to school and at meetings.

Civic sense - Keeping houses, surroundings and streets clean - Co-operation with the Corporation or Municipality or Panchayat in keeping areas clean - Care of Wells - Water taps - Avoiding or preventing wastage.

Knowledge of the locality - A thorough knowledge of the locality for our own help - for helping and guiding neighbours, visitors - A local survey of houses and inmates in the neighbouring area will be always useful to guide others.

Lives of Great Men - Their contribution to the progress of humanity - their service to the country - Qualities worthy of emulation leading to good citizenship - Orderliness at the daily school assembly - Arrangement of squads by leaders - Maintenance of discipline during flag hoisting, flag song, talk etc.

Scouting activities - Red Cross work - History of Scouting Baden Powell - Good manners - Example is better than precept - Shouting and noisterous laughter in society to be avoided.

Social Service (NSS activities) - Details of syllabus - Manual labour at school and at home to help all including neighbours - Adult education - Either individually or under Government schemes - Help at Mobile Medical camps or units - Patrol squads at nights to prevent thefts and burglaries - work under the Red Cross - Adopting villages for social service - Organising, making of roads or approaches to village centres - Periodical, regular cleaning campaigns helping in farmwork or any other useful activities in the neighbourhood.

Health habits and practices - Personal hygiene - clean habits - cleanliness of surroundings soak pits, latrines and urinals - Disinfecting areas around homes and schools, temples and churches or mosques - Purification and or filtering of drinking water - Methods of avoiding pollution or contamination of air and water - Contagious diseases and skin diseases - Prevention and immunisation - Polio, TB and tetanus - Helping authorities in health programmes - Blood donation higher classes - Community health - Nutritious food - Hazards of smoking, alcohol and drug-Nutrition abuse - Avoiding spitting in public places, streets or roads - Use of spittoons chiefly by people using tobacco - knowledge of spread of diseases - Vitamins and use of simple drugs - Pupils to have a knowledge of blood groups - Nutrition - Balanced diet, proteins, vitamins, minerals in the growth of the body.

Things to know or learn - To use a telephone - Postal information - Filling up a money order form, postal acknowledgment - To write out a telegram - Registered parcels - Book posts, Hours of local post offices - Savings bank account - Fixed Deposits, Recurring deposits - Withdrawals and deposits.

Home needs - To fix up a bulb - To use a meter - To put up a fuse - Emergency telephone numbers - Local fire hydrants and wells - Bus and railway timings - Proper handling of a hammer, screw driver and spanner - stitching a button - Mending a tear in cloths - Hobbies and crafts - Individual hobbies and crafts to be encouraged - Rules of the road - Prevention of accident - Ecology and care of trees - Planting of trees - Care of trees planted by any agency near one's residence - Observation of birds, insects and small animals around us - knowledge and identification of domestic and wild animals and birds kindness to animals - Excursions and camping.

Population control - Advantages of a small family to the family and to the State and Nation - To maintain self-sufficiency in agricultural production food employment opportunities, housing facilities - Control of expenditure on health, education etc. by the State - Raising standard of life.

Pollution of air, water and food - Noise and smoke from vehicles and factories - Poisonous gases - Leakage of stored chemicals water by impurities and germs - Food by bacteria - Germs and pesticides - Need for necessary precaution and safety measures.

Roiling shields of honour - Training camps-Camps - Cultural shows - Running a magazine etc.

MUSIC

Stds I to V

Abyasa Gnana - Sruthiswara exercises-Swaravali - Hechuathayi varisai - Jhantaswara exercises - 10 simple songs,

Jhantaswara exercises - Dhatuswara exercises - Alankaras in Rupaka thala, Thriputa thala and Eka thala - Two geethas in Bila hari raga and Mohana raga Geetha (Vara veena) - 10 simple songs - Bhajans - Thyagaraja's Divyanamakeerthana of Eka thala

Alankaras - Dhruva thala, Matya thala, Ataa thala, Jampa thala - Two Geethas in Bila hari raga (Keraya Neeranu and Paduma nabha) - One Geetha in each of the following Ragas: Kalyani, Ananda Bhairavi and Suddha Saveri - 10 simple songs - Children may be shown pictures of important musical instruments.

Singing Alankaras in two degrees of speed - One Geetha in each of the following Ragas : Kamboji, Bhairavi, Saveri - Simple Jathiswara in Bilahari - 10 songs with division of Pallavi, Anupallavi and Charana in Adi and Rupaka thalas - Names of Sapthaswarams - The principle angas of Thalas (Anudhrutham, Drutham and Laghu) - Children may be shown the pictures of great composers and simple lessons on them may be given. Two Jatiswaras and two Swarajathis - Ten simple songs with the divisions of Pallavi, Anupallavi and Charana - One song for Kummi and Kolattam - Five simple technical terms - Orally taught - Raga, Sampoorna, Asampoorna, Vakja and Vakra - The five Jatis of Laghu - Tisra, Chathusra, Misra, Khanta and Sankirna.

Stds VI to VIII

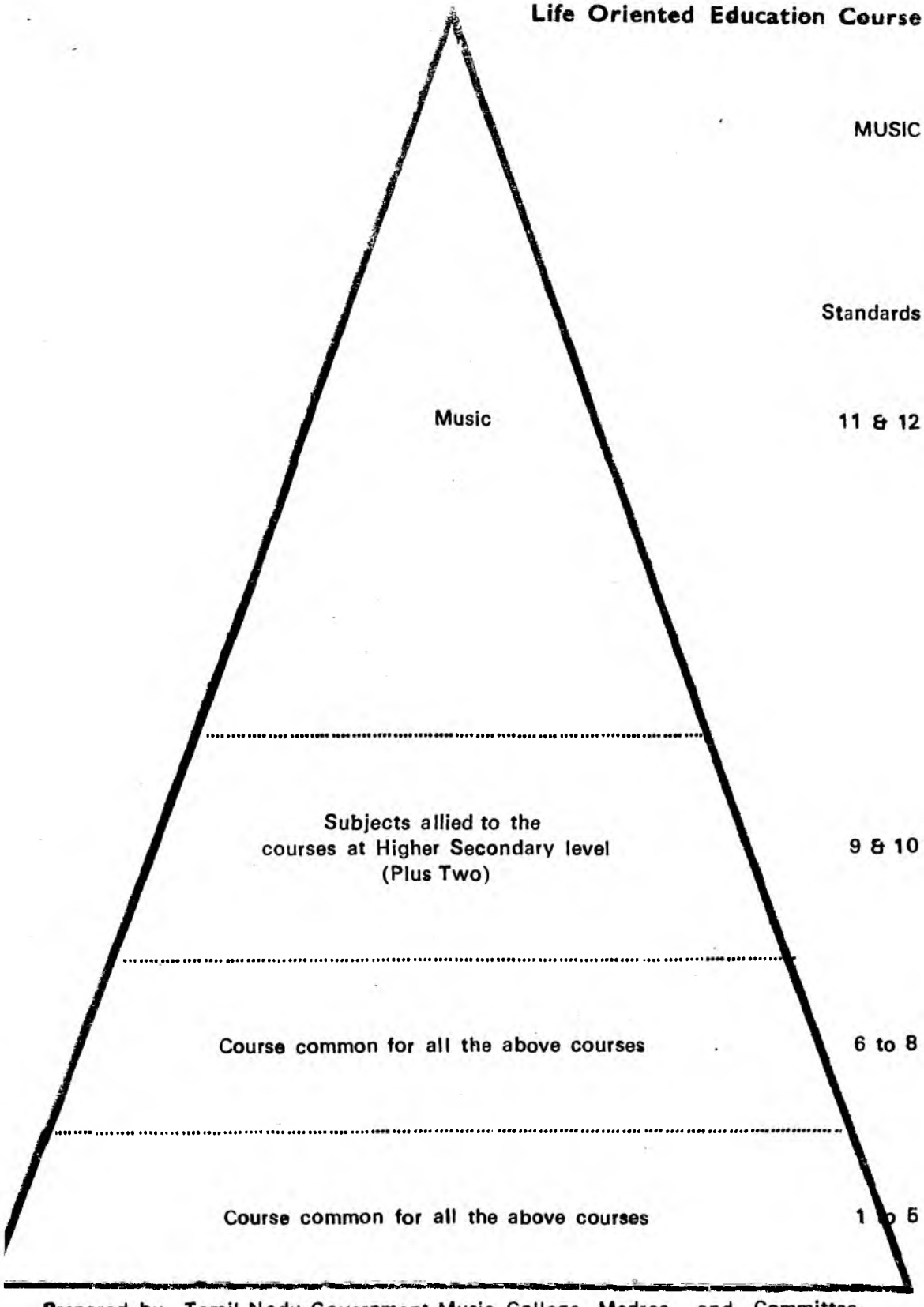
Revision of Swaravali, Jhantaswaras, Hechusthayi swaras, Dhatu swaras, Alankaras Geethas Jatiswaras and Swarajathis - Akara Sadhaka in different Ragas - Simple Janavarna in Mohana and Sankarabharana - Songs in the following Ragas : Mayamalava Gowla, Sankarabharana, Hamsadhwani, Mohana, Kuntalavarali, Arabhi - Nada, Sruthi, Swara, Swarasthana, Sapthswaras, Arohana, Avarohana, Prakrithi and Vikrithi swaras, Komala and Tivra Swaras - Twelve Swarasthana - Janaka Raga and Janya raga - Sapta Thalas and the three principle angas - Anudhrutha, Dhrutha and Laghu.

Tanavarna in Abhogi and Vasantha - Songs in the following Ragas : Madhyamavathi, Bilahari, Hindolam, Panthuvarali, Hari Kamboji, Khamas - Two Thiruppugazh, one Thevaram and one Thiruvarutpa - Upanga and Bhasanga Ragas - Avadva Shadava and Sampoorna Ragas - Principles of S R G M notation - Life history of the composer and his contributions to music.

(1) Purandaradasa (2) Muthu Thandavar

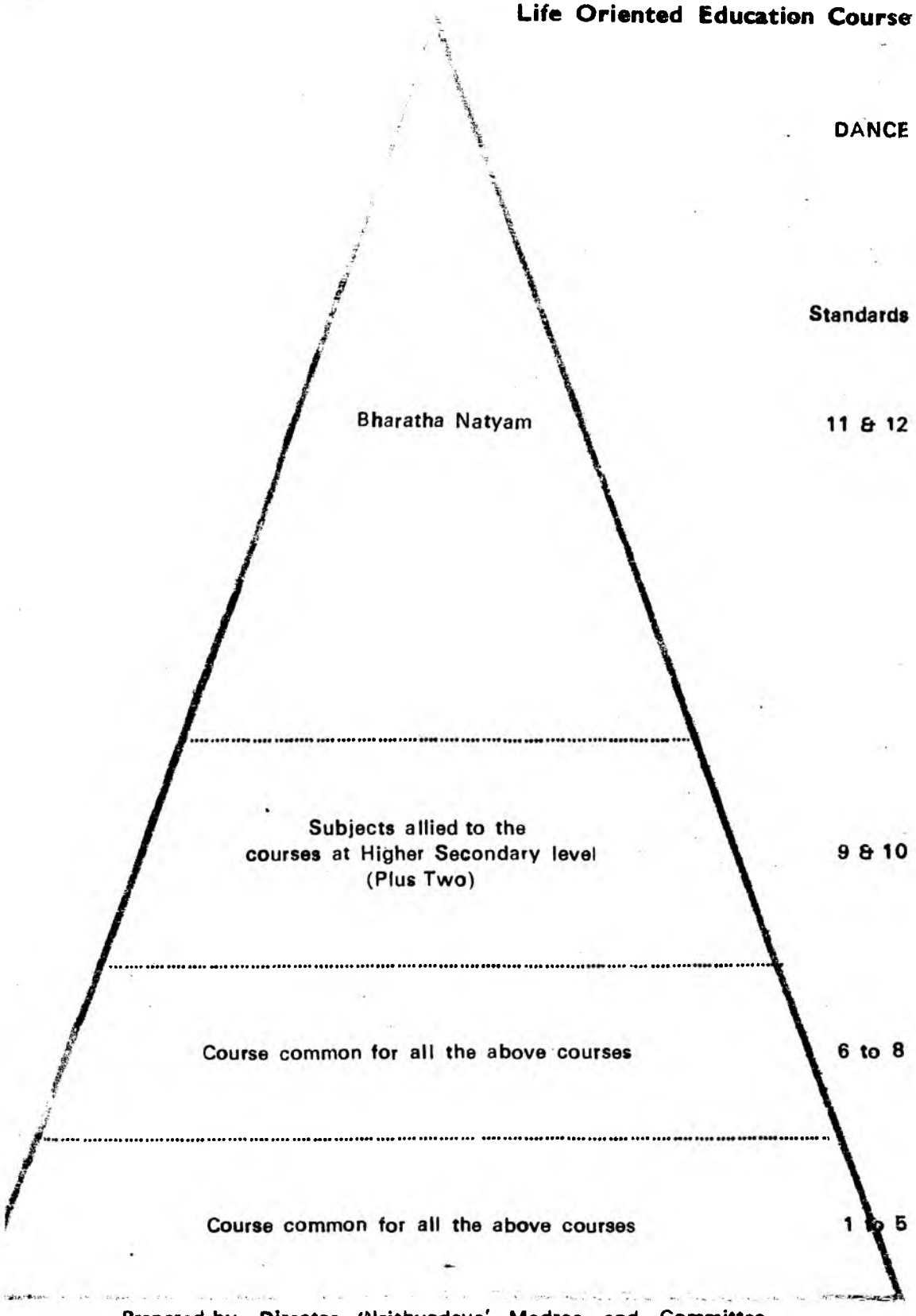
Tana varna in Thodi and Sriraga - Songs in the following Ragas : Suddha Dhanyasi, Kalyani, Bhoopalam, Suddha Saveri, Kedaram, Shanmukapriya - One Tharangam, one Ashtapadi, one Ramanataka Keerthanai, one Nandanar Charithra Keerthanai and two Devarnams - Life history of the composer and his contribution to Music : (1) Sri Thyagaraja, (2) Arunagirinathar - Five Jathis of Laghu and 35 Thalas. Train the children to write notation.

Life Oriented Education Course



Prepared by Tamil Nadu Government Music College, Madras, and Committee

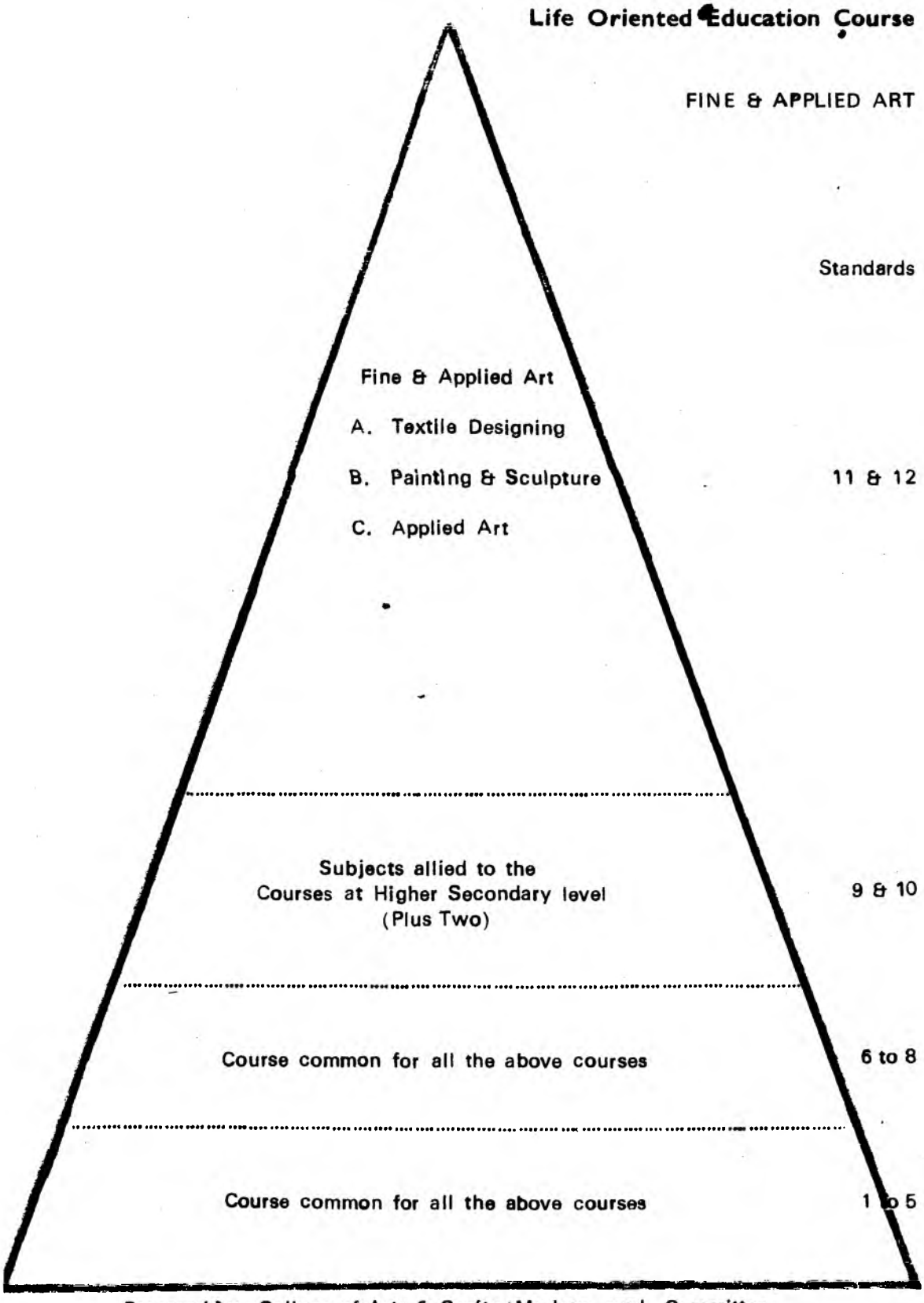
Life Oriented Education Course



Prepared by Director, 'Nrithyodaya', Madras and Committee

Life Oriented Education Course

FINE & APPLIED ART



Prepared by College of Arts & Crafts, Madras and Committee

DANCE

Stds I to V

Action songs (Nursery rhymes) - Twelve Basic Yoga exercises and Six action songs - 25 simple adavu - 30 complicated Adavu - Kolattam - Exercises of Raga.

Stds VI to VIII

Simple and combined hand gestures - Alarippu (Simple Swara Jathi) - pinnal Kolattam - Saptham, 2 patham, 3 Group-dances, 2 Folk dances - One Thillana, 3 Patham - Exercises of eyes and eye-brows, Complicated pinnal Kolattam.

FINE & APPLIED ART

Stds I to V

Free illustration and Drawing - Nature drawing (Natural) - Object drawing (Man-made) - Pattern drawing - Story illustration - Simple square, Circular object - Simple block printing with vegetables - Craft ; Shade makings - Paper folding (boats etc) - Clay work, any natural forms - Picture drawing related to school environment - Running design (border design) - Basket, box making and toys with clay - All over pattern suitable for dress materials.

Stds VI to VIII

1. **Free illustration :**
   Story illustration related to their subject like language history etc., such as from daily life
2. **Nature drawing** foliage, plants, trees, birds, animals, human, landscapes
3. **Object drawing :**
   Drawing the objects they need in school and house from observation and memory
4. **Pattern Drawing :**
   Design for leather work, textile, ceramic, posters etc. Commercial art - lettering, advertisements and posters related to their school activities
5. **Drawing subjects :** related to the school curriculum, Maths, Science and History diagrams
6. Specialising any one of the following subjects :

(*a*) Textile design :	Tie & Dye Batik Block printing (Wood and Lino)
(*b*) Applied Art :	Lettering Book binding
(*c*) Drawing and Painting & Sculpture :	Drawing & Painting Clay modelling Paper mache (puppets and masks)

AGRICULTURE & ANIMAL HUSBANDRY

Pre-Primary

Play-way method - Naming the common plants, flowers and fruits-Domestic animals-Nutrient value of fruits and vegetables.

Stds I to V

Observation of plants, trees and creapers in their surroundings - Domestic animals - food crops - Non-food crops - Kitchen gardening - Vegetables and fruits - looking at insects - pets - naming them - learning about cultivated and non-cultivated lands - Basic knowledge of soil, sand and clay and alluvial soil forming of small gardens in the school - formation of bunds - selection of seeds for sowing - Pests and diseases-seasonal crops - Harvesting - animal health.

Stds VI to VIII

Learning about season - Visit to farm during agricultural seasons and helping the farm workers - Soils - breaking up of soil building and preparation of plots - nursery plots-sowing and replanting preparation of seedlings - selection of best seeds - Manuring - kinds of manures, organic and chemical manures, methods of application of the husks-weeds - identification of weeds - peste and diseases - common pest control measures - Irrigation - kinds of irrigation and methods of irrigation - Harvesting - time of harvest - method of harvest - kinds of storing - methods of storing - Marketing of crops - study of important crops of Tamil Nadu - Management of small farm - cattle health - dairying, poultry, bee-keeping - fisheries.

ANIMAL HUSBANDRY

Stds I to V

To gain basic knowledge on domestic laboratory and pet animals and birds and their uses - To explain the classification of domestic laboratory and pet animals and birds and their general habits - To explain in general the feeding and housing requirements of domestic, laboratory and pet animals and birds - To inculcate the concept of prevention of cruelty to animals and birds - To explain the signs of health in domestic, laboratory and pet animals and birds - To describe the economic importance of various animals and birds in terms of Products obtained from them - To know the characteristics of common breeds of domestic, laboratory, pet animals and birds - To know the terminology of male, female and young ones of the above.

Stds VI to VIII

To impart basic knowledge, characteristics and importance of milk, egg, meat and the byproducts of food animals and birds - To understand the qualities of milk, egg, meat and animal byproducts and to gain knowledge on methods of collection, storage and preservation - To explain the basic principles of Management of various animals and birds - To impart knowledge on the transport of animals and birds - To emphasise the importance of Zoonatic diseases and their prevention.

HOME SCIENCE

(Common for all the courses in Stds I-VIII)

Pre-primary

Understanding the use of vegetables, fruits and green leafy vegetables given in the Hon'ble Chief Miffister's Nutritious Meal Programme. Watering the plants in the school garden. Grading and cleaning the vegetables and green leafy vegetables. Following the good habits while eating (i.e), washing mouth, hands and legs before and after eating, eating without spilling and washing their plates. Maintaining cleanliness of the body, dress, environment and shelter taking preventive measure to eradicate diseases. Keeping play and household equipments in its appropriate places. Giving respect to Child Welfare Organiser and Ayah. Playing co-operatively with each other. Participating in prayer, flag-hoisting, reciting Thirukkural, respecting teachers and elders. Learning the concept of colours, shape, size and weight. These activities are taught through songs and stories.

Life Oriented Education Course

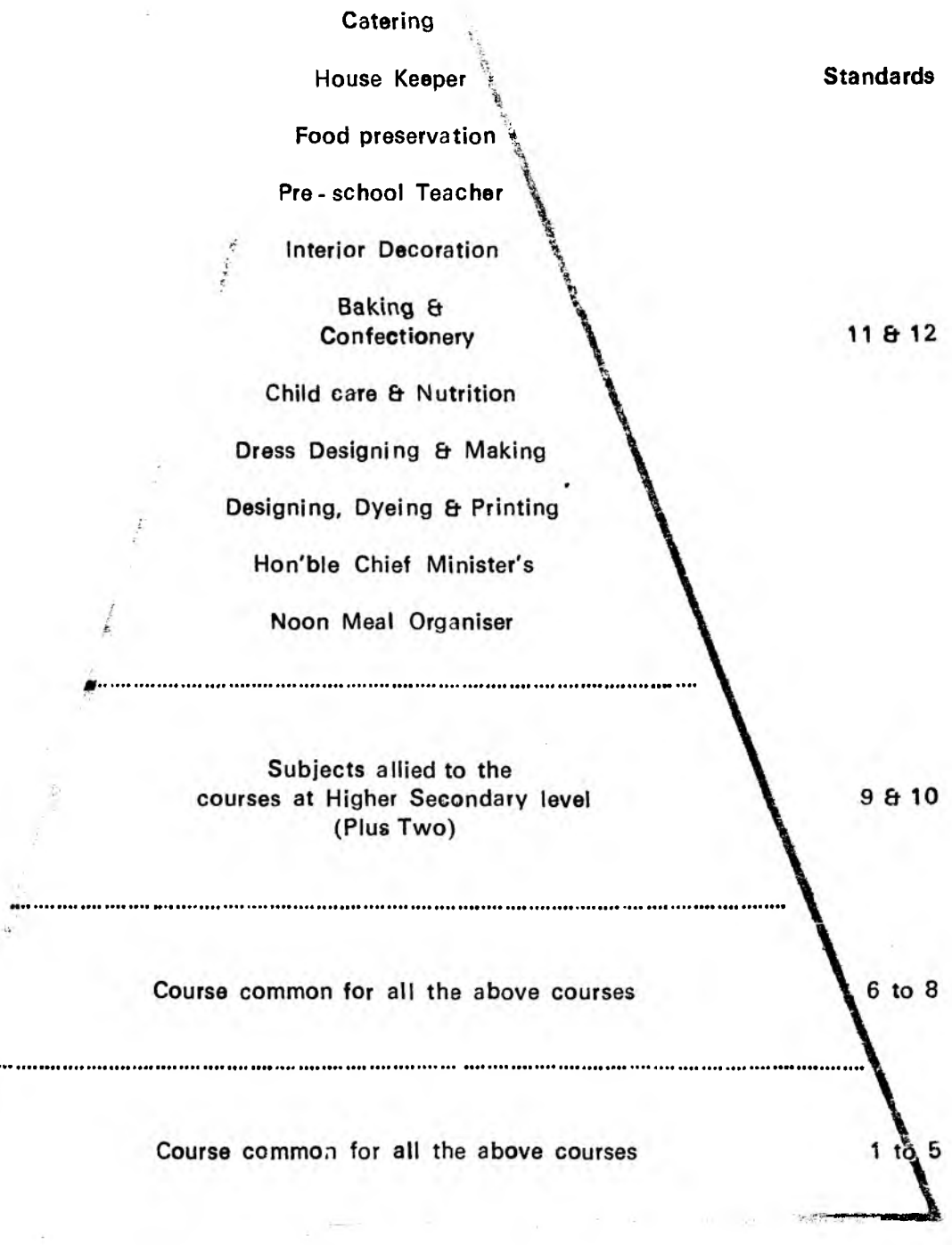
AGRICULTURE & ANIMAL HUSBANDRY

	Standards
Poultry Dairying Fisheries Crop Production Agro based Industries Agricultural Chemicals Farm Mechanics and Post-Harvest Technology Floriculture & Medicinal Plants	11 & 12
Subjects allied to the courses at Higher Secondary level (Plus Two)	9 & 10
Course common for all the above courses	6 to 8
Course common for all the above courses	1 to 5

Prepared by Dean (Agriculture), Tamilnadu Agricultural University, Coimbatore
Dean, Madras Veterinary College Madras, Dean, Fisheries College, Tuticorin and Committee

Life Oriented Education Course

HOME SCIENCE



Prepared by Director, Sri Avinashilingam Home Science College for women, Coimbatore & Committee

Stds I to V

Maintaining cleanliness of the body. Cultivating hygienic habits, maintaining the cleanliness of oneself, school and its environment. Following the measures to prevent the accidents that usually happen at school and home. Learning simple First Aid. Singing songs on nutrition. Realising the benefits of the participation of Tamil Nadu Hon'ble Chief Minister's Nutritious Meal Programme. Collecting good proverbs on nutrition. Visiting vegetable and fruit marketing places. Helping to select and purchase the food commodities for the school and home. Knowing about the importance of green leafy vegetables, fruits, pulses and cereals. Supervising and helping during cooking at school and home. Adopting the habits to be followed during eating. Knowing the reasons, for food spoilage, loss and food poisoning specially diarrhoea and dysentery. Knowing the ways to prevent them and the importance of vaccination. Avoiding the food wastage. Adopting disciplinary techniques while praying, serving and eating. Following hyginene, happiness and hospitability while eating. Keeping the houses and classrooms clean and decorative. Dressing according to the climate, learning to stitch clothes (eg) to stitch torn garments. Measuring the height and weight of the children. Planting crops and vegetables in the school and observe their growth and uses. Collecting the pictures regarding food, houses, flowers, gardens, plans and learning to draw them. Learning songs, stories and dramas regarding the importance of Home Science.

Stds VI to VIII

Training to remove health hazards. Knowing and preventing environmental accidents. Recognising the mode of transmission of com municable diseases and their prevention. Practicing the use of water and food commodities, hygienically. Identifying malnutrition. Including nutritious food in the diet to prevent nutritional deficiency. Understanding the importance and operation of the Hon'ble Chief Minister's Nutritious Meal Programme. Noticing the changes during cooking, participating in Purifying the food commodities. Helping in the food preparation at home, Purifying the food commodities. Looking after the younger ones, purchasing the food items and in main taining the accounts. Writing the names of the children's favourite baked products. Supervising, helping and measuring the food commodities in units. Knowing the simple dietary treatments for childhood diseases such as diarrhoea, cough, fever and skin diseases. Adopting healthy habits. Planning and preparing a day's menu. Maintaining kitchen garden and school garden and enjoying the products through the same. Visiting the nearby noon meal centres, observing, participating in the activities. Pressing according to the seasons and stitching small and simple garments. Stitching the torn garments, cleaning, washing, ironing and pressing the cloths. Decorating the house, classroom and school. Participating in child care. Joining in small saving scheme. Observing the appearance of the building, Visiting water supply and drainage system Eradicating mosquitoes.

LIFE ORIENTED EDUCATION

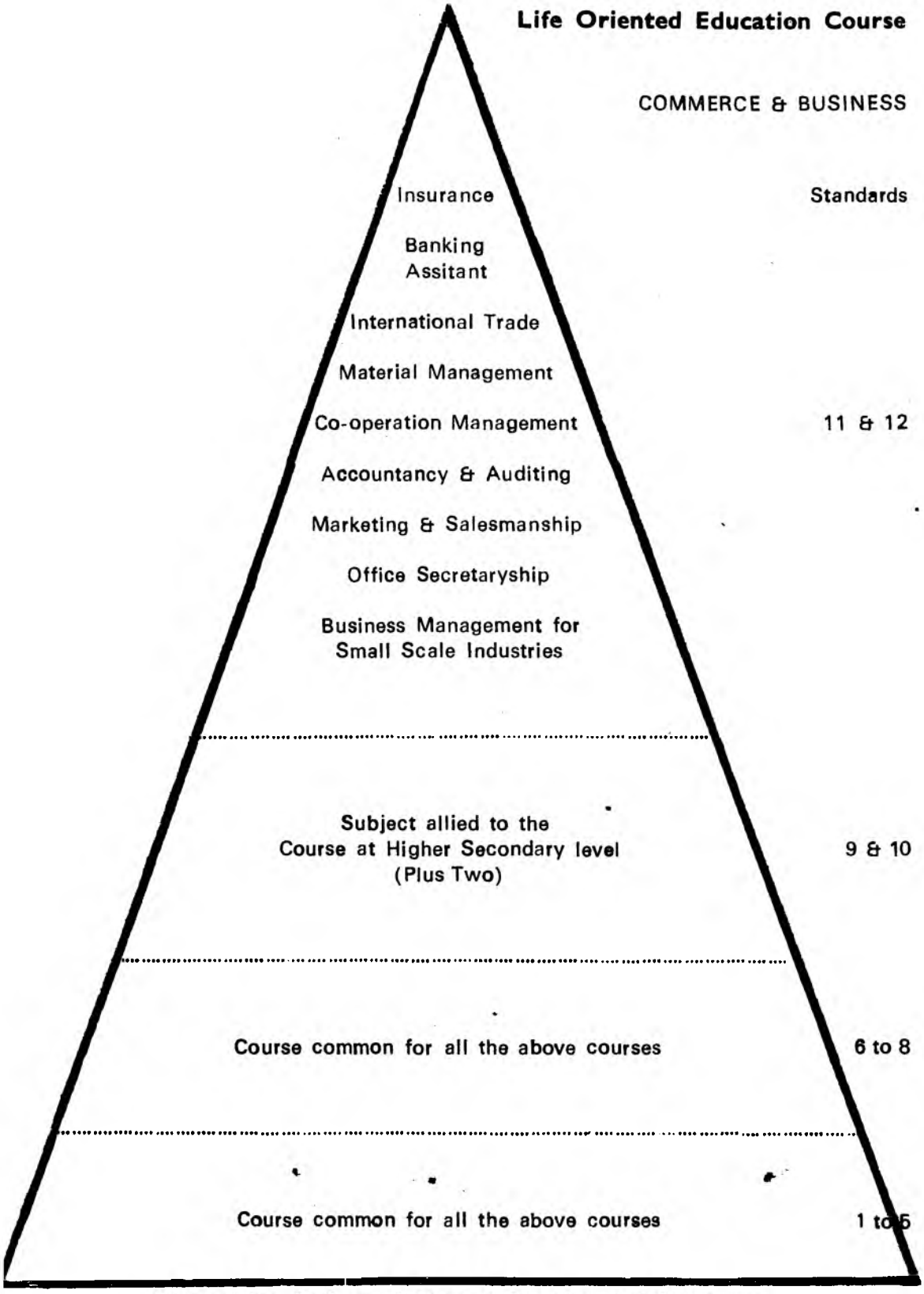
Major Vocational Area : Commerce and Business

Aims for Standards - I to V

Stds	
I.	To explain the idea that the grocer's shop sells certain articles for our use and it is a business activity - Example - Identification and counting of coins and totalling.
II.	To explain the terms Goods, Sale, Purchase and Price - Example - Counting of coins - different denominations - Simple addition - subtraction - Small currencies.
III.	To tell what is trade - shops - different kinds - Examples-what is a bazaar ? - Fruit stall - Vegetable shop - Stationery Stores - Utensil shop - Textile shop - Jewellery shop - Medical stores - different denominations and combinations of coins - currencies to buy goods.
IV.	To explain the idea that trade, industry, banking and service are different and all are business- What is trade? - Provided good-industry - manufacturing of goods- Banking - deposits, lending etc., money for trade, industry etc. - Service - transport - Road, rail air, sea transport - movement of goods - Trade, industry, banking and service - The function and role of each - Commercial geography. Use of monetary units - Sums - Addition, Subtraction Multiplication and Division.
V.	To explain a typical sale transaction - by way of a dialogue between seller and buyer - To buy an article - the points to know - To sell an article - the points to know - Sale transaction - the process of selling - A model sale transaction - Conversation between the buyer and seller - The Price transaction - model to be worked out. Units of measurement in sale or purchases involving simple monetary computations - units of measurements for several types of products - model ; - Units of measurements for rice, fruits, groceries, oil, ghee, vegetable, cloth etc., - A mini shop with students as sellers and buyers may be arranged and observe dialogue.

Life Oriented Education Course

COMMERCE & BUSINESS



Standards

11 & 12

9 & 10

6 to 8

1 to 5

Prepared by Professor & Head of Department of Commerce, University of Madras, Madras & Committee

LIFE ORIENTED EDUCATION
VOCATIONAL COURSE

Aims for Standards - VI to VIII

Stds	
VI.	Business is an economic activity - Supply of goods and services for consumption - Business which sells quality products at reasonable price succeeds in the long run - Production of goods in a factory - carried to the shop through middlemen, whole salers, retailers etc· Transport plays an important role - Services like banking, transport part of business activity - Banks help business by giving loan - other services like draft, cheque, accounts, agency services, cloth trade - Goods and services - good or bad., - poor quality goods - sold in the short run - but the consumers may not like to get these products again - Businessmen should sell good quality goods only - good market in the long run - price should be reasonable - What is a cash book Preparation of a small cash book of a seller with a few transactions.- transactions involving cash dealings.
VII.	To explain that transport, banks and insurance services are required by business in many ways. Business needs finance, transport facility and protection from risks. Transport - Models of transport - Road, Rail, Air and Waterways - Services rendered by each - Banks their services to the business - their functions - Insurance - Types of insurance - Life, Fire and Marine - Risks in business - need of insurance to business - a model cash book and a model pass book may be prepared - Example - a few deposits and withdrawals may be given.
VIII.	Role of consumers ; knowing the quality and uses of a product, ensuring a fair price, freedom of choice by using available information and patronising the business house which is fair - Consumers' knowledge about the alternate products available - freedom of choice by using available information - Information may be available from advertisement, mass media etc., - Commercial geography - Trade Inland and International - names of some brands for some products.

ENGINEERING TECHNOLOGY

Pre-primary

Identification of Metals, Alloys, wood and plastic Materials, Cotton, Synthetic fibres, paper - Iron-steel - Tin - Aluminium - Lead - Copper - Gold - Silver - Brass - Bronze - Stainless steel, Types of wood Plastic Materials Types of Cotton, Synthetic fibres, Types of paper.

Standards I to V

Identification and handling of Handtools Hammer-knife Screwdriver - Tongs - pincers - Scissors - Pliers - Takli, Charka, Spanner, Wrenches.

Identification of fasteners Nails - Screws - Bolts and Nuts - Brackets - Rivets - Hooks - Hings

Identification of shapes and sizes - Square - cube - Rectangle - circle - sphere - cylinder - cone - elipse - Hemisphere - Polygon - Pyramid.

Identification of simple electrical and electronic objects like bulbs, fans, Radio, Tape recorders, Video, Television, computers etc.

Identification of Building materials and tools - Brick - clay - sand - lime - cement - concrete - Trowel - level Bar.

Standard VI to VIII

Identification of the application of metals, wood, paper, cotton, synthetic, fibres, Ink-Making of simple models out of card board, Plastic, wood and Metal sheets.Assembling and dismantling of play toys, kits and mechano sets. Simple drawing of objects, figures and scenery. Ability to use simple measuring tools like scale, set squares, pretracter and measuring tapes, training to use precision measuring instruments like vernier calipers, micrometers. Basic knowledge of computers - Types and uses.

HEALTH

(Common for all courses in Stds I-VIII)

Pre-primary

Play way methods - Nutrition - Recreation - Habits - Activities.

Stds I to V

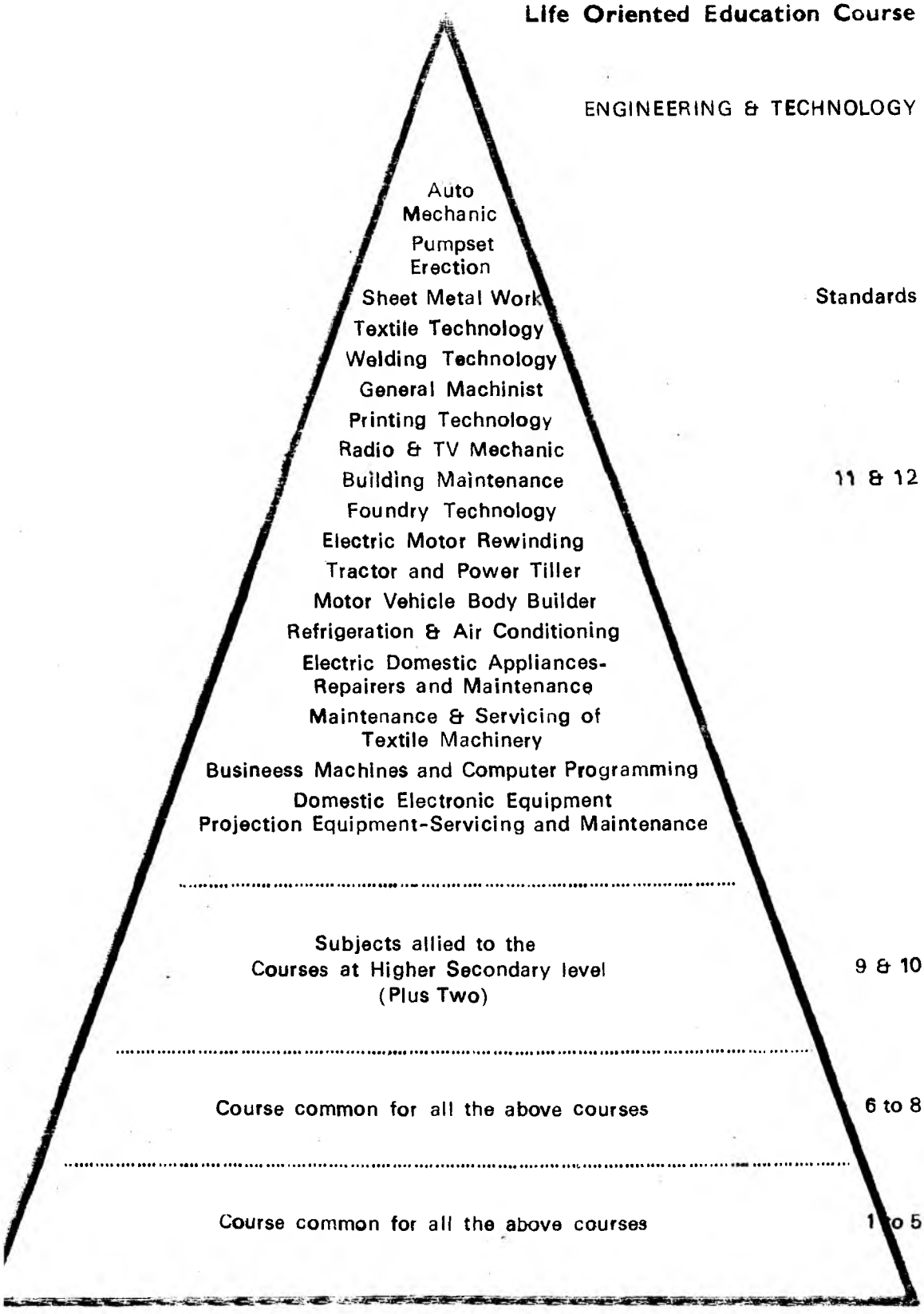
Basic manipulative skills - Paper, Card - board, cloth, leather and clay work - Observation of living beings - Classification and hapits - Diseases of living beings - Symptoms and causes - Removal of Excreta - Difference between living and non-living things. Training in cleanliness - Personal hygiene - Formation of good habits - Development of physical health - Physical Health and Nutrition - Importance - Safety and first aid - Common accidents at Home and first aid for this - pet animals-importance-Safety and first aid-Common accidents at Home and first aid for this - pet animals-Development of love and sympathy towards them.

Stds VI to VIII

School environment - Beautification - Training in keeping classrooms and laboratories neat and tidy, white-washing - Diseases common in school children - Mode of infection and practice Preventive measures- Laboratory work - Study of parts and uses of Microscope - Pets - Breeding and feeding - Safety and First-aid - Accidents occuring outside home - Reasons and prevention - Fracture, cuts,

Life Oriented Education Course

ENGINEERING & TECHNOLOGY



Standards

11 & 12

9 & 10

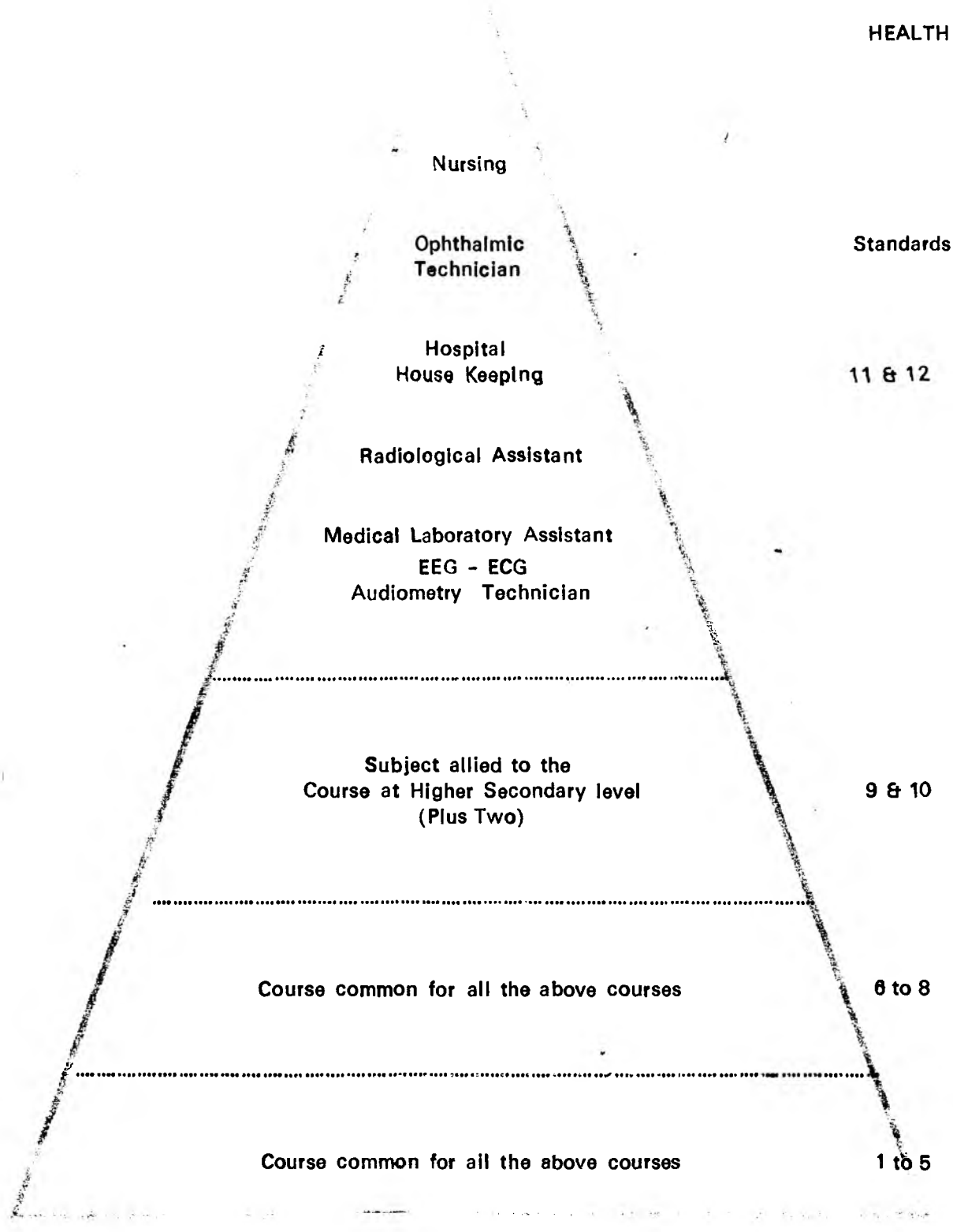
6 to 8

1 to 5

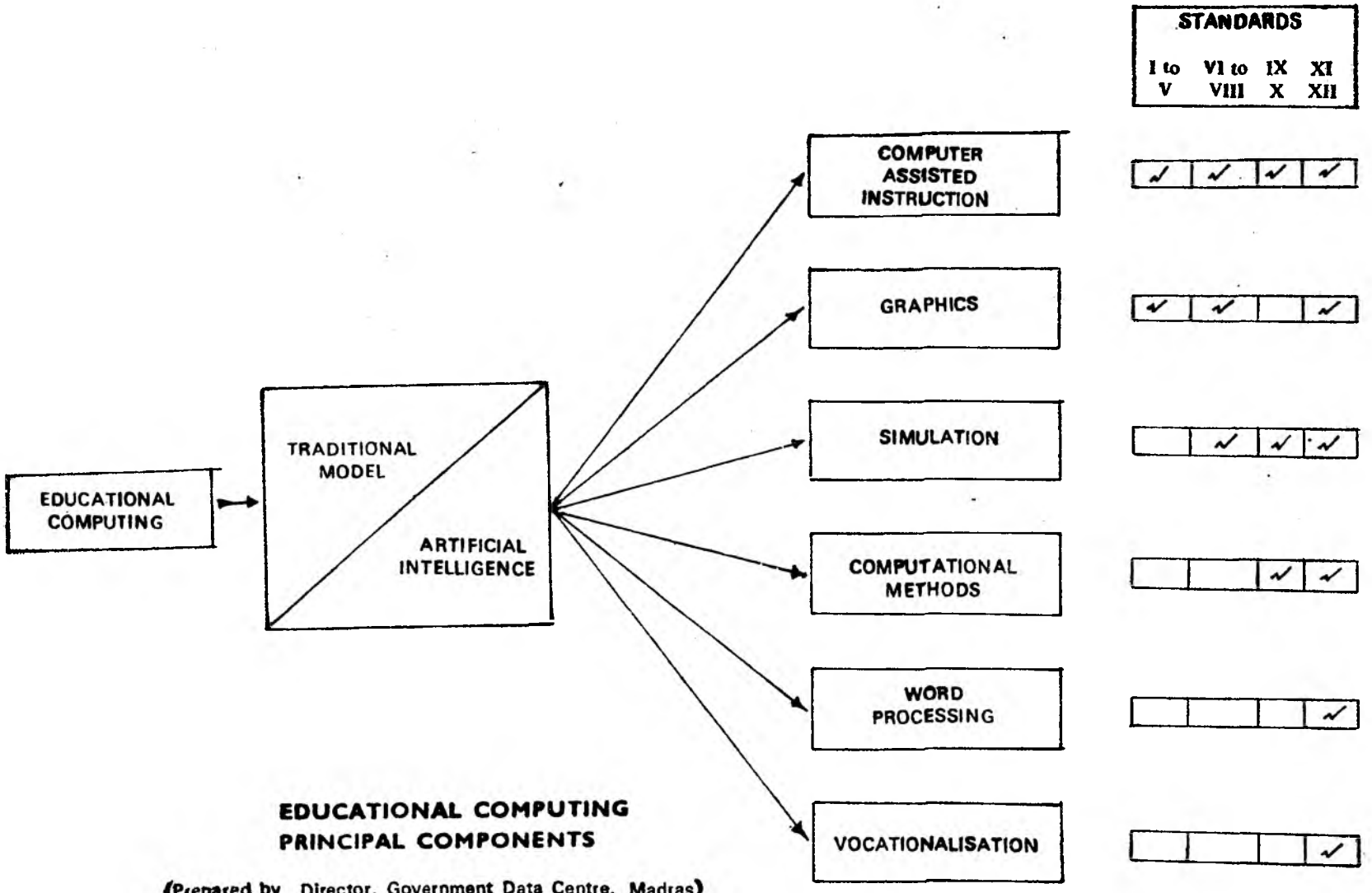
Prepared by Department of Technical Eucation, Madras, and Committee

Life Oriented Education Course

HEALTH



Prepared by Directorate of Medical Education Madras, School of Nursing Madras, Principal, Madras Dental College Madras and Committee



EDUCATIONAL COMPUTING
PRINCIPAL COMPONENTS

(Prepared by Director, Government Data Centre, Madras)

poisonous, insect bites - applying medicine and bandages - Public hygiene - Students' role and participation - Spread of diseases - Pollution of food, water, soil and air, prevention - Location of unhygiene areas - Eradications of the causes of pollution - Community health - Determination and discipline in following the principles and rules at school and society - Training at Health Centres - Use of soakage pits - Use of latrines - Participants in public health activities in co-ordination with Parent Teacher Association of the school - What is health ? - What is healthy environment ? - Definition of communicable diseases - What is a hospital ?- ideal hospital - ideal location of the hospital - Services rendered in a hospital - Knowledge of the infectious disease-hospitals - Simple rules to be followed while we visit the hospitals - What is disinfection - Common household pests transmitting diseases and their control - Diseases transmitted from animals and their control - Diseases transmitted from Rodents and their control - Water born diseases and their control-Principes of Noise pollution - Methods of sterilisation-Simple dietetic rules, nourishing diet and balanced diet.

EDUCATIONAL COMPUTING

Stds I to V

1. Computer Assisted Instruction :
   Question Answer Scheme, Matching Aids and clues by the Computer Lessons in Language

2. Graphics :
   Target Seeking Video Games.

tds VI to VIII

1. Computer Assisted Instruction.
   Sequenced lessons Comprehension Adaptive Route through the lesson Scoring Lessons in Language, Arithmetic, Civics.

2. Graphics :
   Treasure Hunt Exercises, Puzzles Composition of pictures, Cartoon, Geometrical figures

3. Simulation
   Experiments in Life Science Situation in Civics.

ANNEXURE - 3

Summary of various recommendations made by the Heads of Schools & Inspecting Officers in the district level Chief Minister's Scheme of LOE Workshops

I. CREATION OF FAVOURABLE CLIMATE

1.1 **Teachers Meetings :** Frequent meetings may be convened by Headmasters to plan the strategies for creation of climate and for implemetnation of the Chief Minister's Scheme of Life Oriented Education. **(CMSLOE)**

1.2 **Involvement of students & creation of awareness** Generate awareness among pupils in the morning assembly. Pupils can carry the message to the parents and society. The services of Scouts, Guide, JRC, NCC, NSS can also be used.

1.3 **PTA Meetings :** Explain all aspects-the need and importance of the scheme. stages and stategies of implementation. Specialists and experts among parents can be involved in the LOE committees and in teaching skills.

1.4 **Use of mass media :** Films, slides, tapes (if possible Video tapes) can be used. News bulletins, Magazine, News paper, posters can also be used.

1.5 **Cultural Programme :** Depending on the resources many of the following can be organised. Musical performance, play, dramas, Folk songs and dances, Villupattu, Field visits to factories and work spots, Debates, Discussion panels, School day celebration,Organisation of exhibitions, celebration of Life Oriented Education week-any other activity.

1.6 **Constitution of LOE Committee :**

Involving the services of PTA members-utilise non-member specialists also. These Committees can help in preparing or planning the strategies to create awareness & climate. industrialists and entrepreneurs may also be involved.

1.7. **Voluntary agencies :**

The voluntary agencies in the village/ town such as Lions Club, Rotary Club, Mahila Mandal Youth Club, etc., can also be involved.

1.8 **Funds :**

The PTA and voluntary agencies can help. The appropriate school funds can be used depdening on the nature of activity.

1.9. **Radio and T.V.** At State level, pro grammes to create awareness and favourable climate can be organised by ETC, State PTA, SCERT through Radio and T.V. Films and Department of information.

II. IDENTIFICATION OF COURSES

2.1 **Survey :** Formal or informal survey of the area. All basic criteria for selection of courses may be analysed. The Life Oriented Education Committee and the experts, entrepreneurs, industrialists may be involved in designing and completing the survey.

2.2 **Criteria for selection :** The following criteria may be considered in selecting the new courses :

(*a*) Pupils : age, abilities, aptitude.

(*b*) Teacher : Experience and abilities of Existing teachers Artisans, craftsmen-specialists, experts, professionals, availability and willingness.

(*c*) Raw materials : Availability, Cost, transportation

(*d*) Needs of the locality : The present & future needs

(*e*) Equipment & Tools : Extent of availability Further needs, Suitability, Modernisation, Personnel for maintenance.

(*f*) Building & Infrastructure : Adequacy, Further needs & Repair.

(*g*) Resources : Funds, availability & means of raising funds.

Industries, workshops other resources needed-their availability and co-operation.

(*h*) Market : Present and future demands. Present and future supply - Means of marketing and facilities for sales.

(*i*) Rules and Regulation : Existing rules and regulations departments to be approached.

(*j*) Other agencies which could help : SIPCOT, Bank, Agricultural Department and other departments, Khadi Village Industries, Small Scale Industries Department, Directorate of Employment & Training or their branches.

2.3 **Others factors to be considered :**

(*a*) The courses now offered by Department of school Education, Department of Technical Education,

(i) Preparing the students for the existing technical courses for which examinations are conducted by the Director of Government Examinations

(ii) Avoidance of courses offered by technical schools/polytechnics/ITIs,

(*b*) Co-ordination wih other schools in the area to avoid overlap or over production by forming co-orindation committees of the local Head-Masters in a specific area.

(*c*) **Category of courses :** It can be related to industry of the locality, agro-based industry or Agriculture. Saleable skills may be given priority,

(*d*) **Modernisation :** The courses need not be traditional ones. It can be to the emerging demands of the modern society,

(*e*) **Option/choice :** Pupils need not be compelled to take hereditary trades unless they have interest,

(*f*) **Demands of the Departments :** There are certain products which are required by the Education and other departments. The courses which can help to produce them may also be planned provided there is no overlap or over production,

e.g. Chalk Making, Stationery articles (Ink making etc) Carpentry, Kitchen garden (Vegetables for Noon Meal programme) Bakery, Mat weaving, Ink making, Book Binding, Note book manufacturing, Production of household articles, surf, Vim, Soap, Match box etc.

(*g*) Courses offered at Higher Secondary stage should also be considered for the sake of continuity.

III. CURRICULUM DEVELOPMENT AND RENEWAL

3.1 The Department of School Education has already developed syllabus for developing common basic skills starting from Std. I to Std. X in several trades leading to the six major areas of vocational courses. These standardised syllabi can be adopted.

3.2 When a new course has been identified, syllabus and curriculum will have to be prepared utilising the services of the LOE instructors in the school and experts in the field chosen.

3.3 3 or 4 schools in a district which would like to have a new course, they may jointly, utilise the services of local experts.

3.4 **Principles for preparing curriculum for LOE courses :**

(*a*) The needs of society and job requirements,

(*b*) Determine the weightage for theory and practicals,

(*c*) Consult, similar or allied curriculum materials and prepare the detailed syllabus with curricular reference materials, activities and practicals.

(*d*) Explore the possibilities of giving on the floor practical training before drafting the syllabus in practicals,

(*e*) Check up whether standard reference-materials, text books, manuals, guide books are readily available. If not, whether guide book could be developed by the curriculum framers,

(*f*) Chalk out scheme of evaluation and examination for both theory and practicals,

(*g*) Forward the syllabus to the Education Department for approval, expert opinion and dissemination to other districts/schools.

3.5 The Syllabus should be renewed at least once in three years to suit the changing technologies.

3-6 Due to changing demands, some of the courses may have to be dropped and therefore it would be better to have part-time teachers, and minimum investment on permanent equipment and building for such courses.

IV. DEVELOPMENT OF INFRASTRUCTURE

4.1. As far as possible the existing facilities can be utilised either by orientation of the teachers or by modification of the building, equipment and other facilities by selecting atleast one of the course which could deploy the existing infrastructure. For example, the existing Art Masters, Craft Masters May be oriented in Screen Printing, Embroidery, Designing and weaving lungies, Modern commercial art, Wax modelling, Doll making etc.

4.2 The services of Post Graduate Teachers, vocational Instructors and Science Teachers may be utilised for various LOE courses with orientation, e.g., Physics Teachers for Electronics Chemistry Teachers for production of chemicals, Biology teachers for Horticulture. They may be paid remuneration depending on the additional hours of work (The rate to be fixed).

4.3 All accumulations in special fees except medical fees may be transferred to a separate account named LOE funds which can be operated by Heads of schools.

4.4 Additional fee may be levied from each pupil as LOE special fee : Rs. 3/5 in Stds. VI to VIII and Rs. 5/10 in Stds IX and X.

4.5 An Institutional Plan clearly indicating the realistic needs of the school in terms of men-machines, materials may be prepared in consultation with teachers, PTA and experts and it can be followed as the guiding master plan.

4.6 The local artisans, specialists and professionals may be requested to act as part-time teachers. They may be paid honorarium according to their hours of work. The Heads of Schools are empowered to appoint the part-time teachers in consultation with the LOE Committee (The rates may be prescribed by Govt.)

4.7 As per the proceedings of the Director of School Education, Rc. No. 276072 W7 (LOE) F2/84, dated 16-7-1984, the Heads of schools are permitted to utilise the accumulated special fee funds as follows :

Upto Rs.1000 by the Heads of Institution
Upto Rs. 2000 by the District Educational Officer,
Upto Rs. 5000 by the Chief Educational Officer,
Above Rs. 5000 by the Director of School Education.

4.8 In the case of aided schools, matching grant may be sanctioned for the purchase of permanent equipment and the Government schools may be given full grant according to the strength of the schools as follows :

Pupil strength	upto 250	Rs. 2,000
	251-500	Rs. 4,000
	501-1000	Rs. 6,000
	Above 1000	Rs. 10,000

4.9 There should be atleast one room or workshop for LOE exclusively.

4.10 Headmasters should also be provided with funds for purchase of raw materials which can be reimbursed over a period by selling the products.

4.11 Actual bus fare/train fare plus Rs. 3 per day may be paid as out of pocket expenses to the teachers accompanying students to workshops which are beyond 8 km. or city/town limit.

V. ACCOMMODATION (GENERAL)

5.1 By proper framing of time-table the extising accommodation can be fully utilised in providing adequate space and facility.

5.2 If additional accommodation is necessary, proposals for additional construction applying the existing rules may be submitted.

5.3 In case the accommodation is inadequate, till such accommodation is available, shift system may be adopted.

5.4 The PTA and other sources may also be explored for providing accommodation.

VI. WORKSHOPS AND PRACTICAL WORK CENTRES

6.1 Development of practical skills which can stand in goodstead in life and in jobs is the core of the LOE programme and hence it is quite necessary that adequate facilities for providing practical training are provided.

6.2 Depending on the nature of the course, simple work centres/workshops may be developed in the school itself if faclities are available.

6.3 In case facilities are not available in school, positive efforts should be made to link school programme by adjusting time-table and other administrative procedures with the local industrial workspots/work centres/workshops.

6.4 The technician/expert in those centres themselves can act as part-time instructors and they may be paid honorarium.

6.5 If the workshop/production centre facility is inadequate for all children, pupils may be taken in batches for practical work.

VII. SELECTION AND ORIENTATION OF TEACHERS

7.1 **Primary level :** Teachers handling primary classes should be given orientaton training. The number of days and nature of training may be decided by the syllabus framers.

7.2 Detailed guide books may also be prepared and supplied to all primary schools as to how they should teach LOE.

7.3 **Middle schools :** Teachers with aptitude for LOE courses and craft Instructors should be given training. The number of days and nature of the course may be suggested by the syllabus framers.

7.4 If necessary, additional part-time craft instructors may be appointed.

7.5 For Stds IX and X, Diploma, certificate holders and persons who have passed Vocational Courses of Higher Secondary Education may be appointed as part-time, full-time instructors. The existing rules for work load may be applied.

7.6 For Higher Secondary stage the existing rules may be followed. Wherever necessary degree holders may be appointed (Agriculture, Home Science, Music etc.)

7.7 If qualified persons are not available in the area, local artisans, skilled persons and craftsmen may be appointed.

Strategies for Orientation Training :

7.8 For Primary and Middle level 3 tier system of training may be followed. The syllabus framers, experts and specialists may train the Master Educators. The master educators will train the teacher Educators at the District Level, who in turn will train the teachers.

7.9 For Secondary and Higher Secondary stages, seperate training courses for different trades/skills may be given. The duration of the course will be decided by the level of skills to be imparted.

7.10 The specialists should also be given training.

7.11 The Primary and Middle school teachers may be given training in the summer vacation.

7.12 The training should be organised in collaboration with the concerned department like Khadi & Village Industries Departments, SIPCOT, TAPCO etc. for higher standards.

7.13 Part-time teachers should not be encouraged to work in more than one school.

7.14 All LOE teachers should be exposed to elements of guidance and counselling.

7.15 There should be a guidance Unit in every High/Higher secondary school. Either a full fledged Guidance Specialist should be appointed or one of teachers may be given training in collaboration with the Directorate of Employment and Trainin-

VIII. COMMUNITY INVOLVEMENT AND HARNESSING THE RESOURCES

8.1 The services of Arts and Crafts teachers and that skilled teachers could be utilised for teaching LOE Course.

8.2 In addition, the local artisans, skilled persons, specialists, experts, professionals can also be involved in organising LOE courses and the PTA could help in identifying suitable Instructors.

8.3 The local community may be involved right from the beginning - the stage of creation of favourable climate.

8.4 Retired specialists/skilled persons can also be employed if necessary.

8.5 The Headmasters may be authorised to appoint part-time teachers subject to approval by Inspecting officers.

The Government may issue directions to all Govt. Departments, Govt. undertakings and Institutions receiving Government aid to spare the services of skilled persons when they are required by schools and to provide infrastructural facilities for giving practical training to student.

Financial Resources :

8.6 Donations for development of LOE courses may be collected through Parent Teacher Association with prior approval of the Education Department.

8.7 The sale proceed (including profit) may be reinvested for meeting recurring expenditure for Life Oriented Education.

8.8 The common fund of the school cooperative may be diverted for the scheme and the co-operative department may be addressed to relax rules if any required.

8.9 The School co-operative stores may be permitted to raise long term loans from Banks (co-operative; nationalised) and Government may issue suitable instructions to Banks.

8.10 School Improvement Conference exclusively for Life Oriented Education scheme may also be organised at range/district level.

8.11 Funds could also be raised through various cultural programmes which can be organised under the aegies of Parent-Teacher Association.

8.12 Initial investment on capital goods and raw materials is also essential. In many of the courses the initial investment on raw materials or small capital goods could be recovered over a short span of time and there may not be need for the Government to spend every year except for the salary of additional teachers required if any, for example in keeping 10 Bee-hives the 50% cost of the beehives can be recovered in the first year itself whereas in carpentry students may require one or two years to acquire skills the extent of selling goods in the market and there may be initial wastage of wood. They may become self-sufficient in due course.

8.13 In order to meet the initial non recurring expenditure such as purchase of equipment, development of infrastructural facilities, for VI to X Standards in High Schools Government grant of Rs. 1,000/- to Rs. 3,000/- per course depending upon the nature of the course may be sanctioned to all schools.

8.14 In the case of Primary and Middle Schools the entire expenditure towards recurring and non-recurring expenditure should be borne by the Government. To

start with each school may be sanctioned a recurring expenditure of Rs. 500 per year per teacher and non-recurring expenditure not exceeding Rs. 1,000/- per teacher in Primary classes and Rs. 2,000/- per teacher in Higher Elementary classes may be sanctioned.

IX. SCHOOL ORGANISATION AND TIME TABLE

9.1 School organisation needs special alteration. The issue of allocating the workload of teachers, and framing the time table has to be carefully tackled.

9.2 Depending on the nature of the course there may be need to bunch/cluster some of the LOE periods together for providing practicals.

9.3 The problem of taking the children to the distant work centre may be tackled.

9.4 Government may have to issue orders to the transport Department to provide concessional rates to staff and students who have to travel to reach the work spot.

9.5 There may be need to pay conveyance charges to the LOE instructors accompanying students.

9.6 The Instructor in the Factory/Firm/work centre may need some incentive if he is not the part-time LOE instructor in the school and is not eligible for any honorarium.

9.7 Training in batches will become more complicated and hence there will be need for framing a flexible system of time table and flexible system of working hours for teachers. There cannot be too rigid a time table or working hours. The staff and students may have to remain after school hours or may have to come before school hours.

9.8 When an ideal provision is contemplated in giving option to students in selecting course, there will be further more complication in time tabling.

9.9 In order to help the Headmaster in all LOE activities, planning, execution, monitoring and reporting there is need for Assistant Headmaster, if the school strength is more than 350. In case the strength is more than 1,000 there may be need for 2 Assistant Headmasters.

X. PRODUCTIVITY AND ACCOUNTABILITY

10.1 The education system should be more productivity oriented.

10.2 By imbibing the mind and involving the hands in productive work, the educational achievement will be better. Efforts should also be taken to make the product of LOE saleable and marketable as far as possible atleast after the initial period of learning. Only profit should not be the chief aim of LOE but emphasis on saleables quality products will act as an incentive to acquire the skills faster and with more attention.

10.3 In consultation with the Instructors and experts quality, norms and targets should be fixed and watched so that the productivity can be achieved paving way for better acquisition of skills at different stages of Education.

10.4 It indicates the responsibility in achieving the objectives, norms and target. The Heads of schools in turn become accountable to higher authorities. They will also be vested with necessary authority to fulfil their responsibility. The Headmasters will be given autonomy to decide the courses, to fix the part time instruc-

tors, to incur certain amount for immediate implementation etc.

10.5 Forms and registers, as discussed in another section will be useful in monitoring the programme of the scheme and to maintain productivity.

XI. FEES

11.1 It has been unanimously recommended that a special fee named LOE fee should be levied from students.

The LOE fee to be collected will be :

I to V Standards	...	NIL
VI to VIII „	...	Rs.3/5
IX to X „	...	Rs. 5/10

11.2 The procedure applicable to all other special fees will be applicable to LOE fee. In fact, it is the Arts and Crafts fee already levied with little enhancement to meet the need for more investment.

11.3 The Heads of schools should be empowered to utilise the funds as follows :-

Heasmasters themselves Rs. 1,000/-
With permission from D.E.O.... Rs.2000/-
With permission from C.E.O.... Rs.5,000/-

XII. STAFF GRANT, MAINTENANCE GRANT, OTHER GRANTS

12.1 The existing rules relating to staff grant shall be applicable to staff appointed for LOE.

12.2 The maintenance grant for the upkeep of the institution may be increased.

12.3 The Government should also sanction grant on matching basis for aided schools for additional building, equipment and machines.

12.4 The minimum investment required for purchase of tools, equipment and raw materials, according to the strength of the schools should be sanctioned.

12.5 There may need for more investment on capital goods and raw materials in certain trades and courses and in that case the Heads of schools will apply for the additional needs over and above the minimum funds recommended for all schools. This should be done immediately after selection of courses and preparation of realistic and practical Institutional plan. The Inspecting Officer will examine the application and release the grants.

XIII. ACCOUNTS AND AUDIT

13.1 Records and Registers and accounts as maintained for special fee fund shall be maintained by the Heads of schools.

13.2 There shall be no deviation from the permitted rate or the purpose for which the levy of LOE fee is authorised.

13.3 The funds shall be utilised for bonafide purposes connected with LOE Scheme and adopting the existing orders.

13.4 The Account shall be completed promptly and shall be kept ready for audit/Inspection at any time.

13.5 The private Institutions shall include LOE account also in the periodic financial statements to be submitted to the Department.

XIV. FORMS, REGISTERS AND MONITORING

14.1 List of Registers recommended to be maintained by office/Headmaster :

Fee receipt for special fees, daily fee collection register, Daily cash book, Ledger to cash book, Consolidated cash book for special fees, Voucher pads, Separate minute books, stock and Issue Register for raw materials, finished product, Progress register for progress of children.

14.2 Records to be maintained by students :

(*a*) Theory and Practical Record Book

(*b*) Separate account book if raw materials are brought by them (To be attested by LOE Teacher)

14.3 MONITORING AND REPORTING :

The Instructor (full time) should submit to the Head of the Institution before 5th of the succeeding month a monthly report in the prescribed proforma.

(Note : Separate report to be given for each LOE subject for each class)

14.4 The Inspecting Officers will consolidate the report (tradewise) and send the same to Director of School Education.

14.5 The Director of School Education will also prescribe forms and statement as and when necessary to get feed back to monitor the scheme.

XV. ASSESSMENT & EVALUATION

15.1 LOE should be an examination subject. Then only it will not be neglected.

15·2 Testing and evaluation will provide motivation on the part of the teacher and the taught to take up the course seriously.

15.3 There should be testing of theory and practicals. The weightages are as follows.

15.4 **Suggestions regarding the Assessment and Evaluation :**

Assessment : Following weightages are suggested :

S.No.	Stages	Theory	Practicals
1.	Stds. I to V	25% (oral)	75% (for identification of things)
2.	Stds. VI to VIII	50%	50%
3.	Stds. IX & X	40%	60% (30 internal and 30 external by the experts)

15.5 **Evaluation :** Should be continuous.

15.6 **Periodicity :** Evaluation must be termwise for both Theory and practicals. For practicals, local arrangements may be made sending the students in groups. Theory part may be evaluated by the concerned school teachers. Local artisans, specialists, skilled assistance can be utilised for the practical examinations. If experts are not available locally, experts from the nearby schools can be brought paying TA and DA.

15.7 Skilled persons are generally available in the locality itself, where such persons are not available, the external experts may be involved for practical assessment.

15.8 Tools for the examination may be prepared in consultation with the teachers concerned. (Note : There can be variations in the weightage of marks depending. upon the trade and situation.)

15.9 In case students in Std. IX and X they may be prepared for the various, technical examinations conducted by the Director of Government Examinations.

XVI. EXAMINATION AND CERTIFICATION

16.1 As indicated in the previous section, the examinations will be conducted by the Heads of Schools and the subjects/ trades studied shall be indicated in a separate certificate in the case of Standard VIII to X, and in the record sheet at primary stage.

16.2 The certificate shall indicate the skills acquired and the levels achieved.

16.3 In the case of XStd, Life Oriented Education will be a Public Examination subject also (arranged like practicals for several subjects)

16.4 These certificates have to be recognised by appointing agencies and circular to that effect may be issued by the Government.

XVII. ADMINISTRATION SUPERVISION & INSPECTION

17.1 Able administration and effective supervision are essential for the success of Life Oriented Education.

17.2 The Inspecting Officers should go round during the surprise visit and the Headmasters should encourage and guide the teachers and students.

17.3 Headmasters may be given suitable relief in his academic work in implementing the Life Oriented Education Scheme (Reduction in periods)

17.4 The group recommend the following rates of remuneration for doing Life Oriented Education work.

(*a*) Headmaster Rs. 50/- p.m.

(*b*) Person assisting the Headmaster in the work Rs. 25/- each per month.

(*c*) If the service of teachers other than Craft Instructors are utilised for Life Oriented Educational Course, they may be paid a remuneration of Rs. 50/- per month. Their services may be utilised without detriment to their normal work.

(*d*) If part-time instructors are appointed for Life Oriented Education Courses each may be paid a remuneration of Rs. 100 to 150/- p.m.

(*e*) If part-time teachers are appointed in two nearby schools they may be paid remuneration in each school.

17.5 The Headmaster may be empowered to select and appoint part-time instructors for Life Oriented Education Courses.

17.6 During 1984-85 the Headmasters in consultation with the Craft Teachers may frame the Curriculam for Life Oriented Education Courses selected for introduction.

17.7 The products got out of the Life Oriented Education courses may be disposed of following the existing procedure. Price of the products may be fixed by the Committee.

17.8 In view of the increased work load of the District Educational Officers and for effective supervision of the CMNMP and LOE Courses, additional posts of District Educational Officers may be created, fixing the number of secondary schools for each District Educational Officer as 30.

17.9 To look after academic work and to asssit the DEO, One post of Headmaster in the cadre of High School Headmaster may be created in each DEO's Office. He may be designated as P.A. (academic)

17.10 For effective supervision of the CMNMP and LOE course, the work load of the Deputy Inspector may have to be reduced. The number of Schools in each District may be fixed at 40. Additional posts of the Deputy Inspectors may be created.

17.11 The existing supporting staff in the Deputy Insopector's Offices is not adequate to meet the increasing work load. For each of Deputy Inspectors' Office, an Assistant and a Typist with a Typewriter may be sanctioned.

17.12 For effective supervision of the CMNMP and LOE Courses a post of P.A., (administration) in the cadre of Field Officers may be created to assist the CEO's.

17.13 A Special Cell in the Directorate of School Education may be created for monitoring and evaluation of LOE and Vocational Courses, comprising of technical persons drawn from different departments and headed by an Officer of the School Education Department.

17.14 For each Revenue District one post of District Vocational Education Officer may be sanctioned for monitoring and evaluation of the LOE programme at the Revenue District level.

17.15 A guidance corner may be created in each Higher Secondary School and one P.G. Teacher may be given training in Guidance and Counselling. The services of such teachers may be utilised in the neighbouring High Schools also.

XVIII. VOCATIONAL COMPONENT IN HIGHER SECONDARY EDUCATION

18.1 The Group welcomes the inclusion of a Vocational component for the General stream students as one of the Four Optionals.

18.2 The Vocational component may or may not be related to the remaining 3 optionals in a group.

18.3 The Heads of Institutions may form a Committee to select appropriate courses, taking into consideration the facilities available, the aptitude of the students, the local conditions and needs. The existing teachers may be given intensive in-service training in the vocational programmes. Part-time teachers with requisite knowledge and skills may also be employed wherever necessary.

18.4 Wherever there is more than one Higher Secondary School, in a particular area or locality, the heads of institution may form a co-ordination committee to select the vocational component to avoid overlapping and duplication.

18.5 The minimum strength prescribed for the introduction of a particular vocational component may range from 5 to 15,

18.6 To meet the expenditure for the implementation of the scheme, a special fee of Rs. 20/- per annum may be collected from each student. A liberal grant-in-aid scheme may be evolved to meet the expenditure.

18.7 The written off machines and other equipment in working conditions available with Government Organizations like TANSI may be supplied to school.

XIX. MODERNISATION SCIENCE EDUCATION AND COMPUTER EDUCATION

19.1 Science Education is essential for learning modern technology and hence there is urgent need to improve science teaching also in schools.

19.2 For the lower standards, atleast ten experiments should be demonstrated by the teacher in a year. For the higher standards atleast ten experiments should be done by the pupils themselves. If not atleast group experiments should be conducted and Record note Books should be properly maintained.

19.3 For 9th or 10th standards - 10 Experiments in all, should be done under practical and this system should be introduced immediately in all schools.

19.4 In most of the High schools, the Laboratories are ill-equipped and every High School must be given Rs. 1.30 lakh for laboratory building and Rs. 20,000/- for equipments as Government grants as an urgent measure for improving science education in schools.

19.5 Every lab. must have an attender and a demonstrator. In the Higher Secondary schools, two lab. attenders are essential.

For a school to be used as a complex school, the distance should not exceed two kilometres.

19.6 The science van attached to the District Educational Officers should be modernised and well equipped. It should frequently visit the newly started schools and demonstrate experiments.

19.7 There should be Addl. science vans to cater to the needs of all schools in each educational district.

19.8. Immediate steps should be taken to construct laboratories and supply equipments.

19.9 Every year science exhibitions should be arranged under the patronage of Parent-Teacher Association to stimulate scientific interest among students.

19.10 VIII Standard should be handled only by the Science Graduates.

19.11 Computer Education in schools can be introduced where there are facilities available in and around the locality. If there are computers in big firms or I.T.I.s or polytechnics, Engineering Colleges in any locality, a cluster of schools around that centre may introduce computer education with the help of the expertise available.

19.12 Large number of High Schools must have a computer in the long run and teachers should be trained in computer education.

19.13 The existing syllabus can be adopted and if needed it can be modified to suitable local needs.

19.14 Large number of schools must purchase a computer from the grant or with the help of donations from philanthropic public.

19.15 Each high school must have atleast one mini computer.

19.16 With the expertise available in the Engineering Colleges, I.I.Ts and firms owning a computer, education can be provided to the teaching staff.

19.17 Computer assisted instruction should start even at the primary level.

19.18 Even the school records like Admission Register, Mark Register, Cumulative Records and other statistical Data can be computerised in the schools.

19.19 The Department should provide the necessary funds for installing a computer and the collaborating agencies should provide the necessary expertise.

19.20 Any willing teacher preferably a physics graduate can be deputed for the training in computer education.

19.21 The period of training can be decided by the experts in the field. Where facilities are available as in the Annamalai University and Government Engineering College, Guindy. Teachers can undergo this computer training out of school hours.

19.22 Firms like BHEL. IIT, Polytechnics, Government Engineering Colleges, Universities can undertake training teachers in computer education.

XX. APPRENTICESHIP, PLACEMENT EMPLOYMENT AND GUIDANCE PROGRAMME

20.1 The essense of Life Oriented Education lies in getting either self employment or job, after completing the school education. For this, intense and qualitative skill development in the school is necessary. In addition there should be scope for apprenticeship and placement.

20.2 At the end of the course a certificate may be issued to the pupils after examining them both in practical and theoretical aspects. The certificates issued may be deemed to be equivalent to other relevant technical certificates.

20.3 As in the case of Plus Two, so also here, it is necessary that one year practical training - cum-apprenticeship should be given with a stipend of Rs. 100/- per month to the X std. passed candidates. They may be given the

first priority in the sanction of loans and other facilities under self-employment scheme.

20.4 Nationalised Banks, various schemes sanctioned by the State and Central Governments and Industries Development Bank can help the children in this regard to the maximum advantage.

20.5 Also preference in the case of various Employment Agencies including Small Scale Industries may be given in comparison to usual academic courses.

20.6 Both educational guidance and vocational guidance will help students to face their educational probems and to decide their career in future.

XXI. PHASING AND PLANNING

21.1 Such a mammoth programme like Life Oriented Education cannot be implemented in all standards in 36,000 schools in the State. Phased introduction is necessary.

21.2 The tentative plan for phasing is as follows :

1984-85 Preparatory work
Pilot Projects in selected Secondary Schools

1985-86 Class VIII or IX of all Secondary Schools

Training of teachers of Pry. Middle schools

Advance supply of Equipment & Tools.

1986-87 Class I, II, III, VI, IX, & X.

1987-88 Class IV and VII of Eley. & Middle schools.

1988-89 Class V and VIII of Eley. & Middle schools.

ANNEXURE — 4

TOTAL NUMBER OF HIGH AND HIGHER SECONDARY SCHOOLS WHO HAVE VOLUNTARILY COME FORWARD TO INTRODUCE CHIEF MINISTER'S SCHEME OF LIFE ORIENTED EDUCATION IN SCHOOLS DURING 1984-85.

S. No.	Name of Revenue District		Number of schools
1.	Madras	....	40
2.	Chengalpattu	....	47
3.	South Arcot	....	50
4.	Thanjavur	....	51
5.	Tiruchirapalli	....	35
6.	Ramanathapuram	....	30
7.	Madurai	....	60
8.	Tirunelveli	....	56
9.	Kanyakumari	....	36
10.	North Arcot	....	53
11.	Salem	....	53
12.	Dharmapuri	....	42
13.	Coimbatore	....	35
14.	The Nilgiris	....	31
15.	Pudukottai	....	20
16.	Periyar	....	61
		Total	700

SCHOOL REPORTS - CASE STUDIES

INTRODUCTION

The revamping of our educational system into a purposeful and fruitful Life Oriented Education has been under the consideration of the Government of Tamil Nadu for the past some time. The aims and objectives of Life Oriented Education has already been defined in the previous chapters. The main aim is to develop self-reliance and self-confidence in children and also to develop useful and specific skills in them. When the Scheme was put before the educational elect of Tamil Nadu, many schools which have the expertise and the infrastructural facilities for various economically useful crafts came forward to introduce it in their schools because they had an implicit faith in the Scheme. The following reports of individual schools wil show how far they have succeeded in implementing the Scheme and the potentialities available in Tamil Nadu to implement the Life Oriented Education.

St. PAUL'S HIGHER SECONDARY SCHOOL, VEPERY, MADRAS

The Standardwise strength of our school is as follows :

V	VI	VII	VIII	IX	X	XI	XII	Total
63	422	411	383	455	322	168	152	2376

We have four qualified teachers in arts and crafts Thiru G. Venkatachalam and Thiru Abraham Mahimaidoss in arts and Messrs. P. N. Shanmugam and G. Arumugam in crafts.

We have introduced the following courses from August '84.

1. Wood Work 2. Toy Making 3. Decoration 4. Doll making 5. Plastic work 6. Mat making (Korai) 7. Mat making (Palm leaves) 8. Art work & 9. Commercial painting.

The Parent-Teacher Association and the School Management have come forward in the right time and donated nearly Rs. 16000/-

Our experienced art and craft teachers and the Junior Mechanic of our school, in consultation with the staff, Commercial Master's Association, prepared the syllabus for the year 1984-85.

This scheme has been introduced in Std. VIII and all the trades are taught during the eighth period.

Raw materials like plastic wire, clothe and timber are being supplied and they are converted into toys/decorative articles, benches and desks by the students.

The monthly recurring expenditure for the crafts put together would be approximately Rs. 1000/-. Rupees five thousand have been spent for the purchase of tools and implements for the purchase of tools and implements for the use of the pupils.

Finished products like benches and desks worth Rs. 1000/- were purchased for the school by the management. Other item like toys, decorative articles and painted bags were sold to the boys. The sale proceeds would come around Rs. 1200/-.

There is a plan to give incentives at the end of the year to the boys who produce more number of finished goods.

Two hours for theory and three hours for practical have been allotted in a week.

Life Oriented Education is a boon to children of our school as most of them come from Choolai, Otteri, Kosapet and Pulianthope labour areas. They would certainly be benefited by this scheme and they can plan their future too.

Sd. .....
Headmaster,
St.Paul's Higher Secondary School
Vepery, Madras-7.

GOVERNMENT HIGHER SECONDARY SCHOOL
ULUNDURPET

This school was selected for the introduction of Life Oriented Education during this school year. The Headmaster attended the Seminar on LOE at Vellore on 26th and 27th July 1984. In pursuance of the guidances given at the seminar, this programme was put into effect in right earnest. The following subjects were selected for imparting instruction to the pupils :

1. Electronics - Radio and T.V. repairs.
2. Fitting.
3. Wood-work.

At the outset a syllabus was drawn up for each subject. More stress is laid on the practicals, than devoting more time on theory to stick to the maxim "An ounce of practice is better than a pound of Theory". Nevertheless pupils have been posted with the basic knowledge in theoretical terms and then made to proceed with the 'Technical Know-How' relating to the subjects chosen by them.

Thiru E. Kalimaharajan, B.Sc., M.Ed., B.T. Assistant voluntarily took up the subjects Radio and T.V. repairs and maintenance and was instrumental in imbibing a creative interest in the pupils who evinced astounding interest in the preparation of exhibits. Similarly Thiru. Veerabadran, Junior Mechanic in the General Machinist Course voluntarily took up wood-work and took keen interest in his job.

For the working of this scheme only a sum of Rs. 900/- (Nine hundred only) was spent on the purchase of materials that were absolutely required for the practicals. More funds will be utilised in the coming years to enlarge the functioning of this scheme on the basis of the experience gained during this school year.

In short this scheme of Life Oriented Education has evoked keen interest in the pupils and it is bound to be laudable provided the teachers put their heart and soul into it in a spirit of disinterested service and adequate funds provided that may serve as wherewithal for procuring materials.

Sd/.....
Headmaster
Government Higher Secy. School,
Ulundurpet - 606 107

GOVERNMENT HIGHER SECONDARY SCHOOL (BOYS)
TITTAGUDI, S.A. Dt.

The Chief Minister's Scheme of L.O.E. Courses have been introduced in this school during 1984-85. This scheme is implemented from 9-10-84 in standard VIII. All the 217 boys of that standard are covered by this new scheme. Five useful courses have been introduced. The students were given freedom in selecting the courses.

Name of the courses and no. of students.

1.	Book binding	40 students
2.	Gardening	51 ,,
3.	Painting	41 ,,
4.	Cycle-repairing	43 ,,
5.	Making of pastic wire bags	42 ,,

Consideration for selection of courses :

The following considerations prompted the selection and introduction of courses 1. Immediate usefulness. 2. Pupils interest, 3. Readily available raw materials and other resources. 4 Marketing facilities, 5. Learning easily with out strain, 6. Developing as a hobby. 7. Learning dignity of labour, 8. Help available from the neighbourhood.

Syllabus :-

The syllabus for the various courses were framed with the help of teachers of this school and local artisans. More importance is given to the parctical rather than the theoretical aspects. Every week one period of 35 minutes is allotted for theory and four periods for practical. The artmaster and local signboard painter framed the syllabus for painting. The local agricultural officer gave his valuable guidance for the gardening course. Book binding syllabus was framed with the help of the binder of a local printing press. For cycle-repairing the help of the owner of a cycle repair shop situated next to the school compound. A sewing mistress helping the Nehru Yuvak Kendra guided in framing the syllabus for plastic wire bags.

Arrangements for teaching :

Three local artisans and two professionalists have agreed to teach the L.O.E. courses. Orders are required for payment of honorarium to them. Till such orders are received two special Assistants and three members of the non-teaching staff who are well versed in the courses have been requested to teach the courses. Now the courses are conveniently taught during the Eighth period. Whenever found necessary the period is extended by half an hour after the school is over. All the practical classes are conducted in the school itself once in a week the students are taken on a field trip to the respective work sports at Tittagudi.

Raw materials

The following raw materials have been so far purchased from the Arts and Crafts fee fund of the school.

Course	*Raw materials*
1. Book binding	Marble, paper, calico cloth, wrapper paper, hard boards threads to the value Rs. 64.75. 5 sets of simple tools like knife, needle etc. to the value of Rs. 24.00.
2. Gardening	Agricultural tools available from the crop production vocational courses are utilised. Seeds and fertilisers to the value of Rs. 35/-
3. Painting	5 sets of various types of brushes to the value of Rs. 69.00 Paint to the value of Rs. 105.00
4. Cycle-repairing	Two sets of simple tools like screw driver, spanner set, cutting pliers, cycle pump etc. to the value of Rs. 128.00
5. Making of Plastic wire bag	10 role of plastic wire to the value of Rs. 65.00. Two sets of simple tools like knife, scissors. Rs 32.00.

Income and Expenditure :

So far no salary or honorarium are paid to the instructors teaching the courses since all of them are working in this school.

All recurring expdeniture so far has been met from the Arts & Craft fee fund of this school. The recurring expenditure per month is Rs. 113.00. Rs. 184.00 has been so far spent towards non-recurring expenditure.

Under book-binding course 12 old books of the students have been bound and two registers of a nearby school were bound Rs. 10.50 has been collected as binding charges.

Under the Gardening course greens were sold.

Pupils are now learning removal of punctures and attending to minor repairs to cycle. Soon they will also begin to earn.

It is proposed to colour wash the office-room of this school. The pupils of the painting course will take up the work.

The pupils of the plastic wire bag making course have been divided into 5 groups. Each group is making a school bag. The work will be completed within 15 days and each bag can be sold at the rate of Rs. 20/- each.

It is proposed to divide 25% of profit among the students as incentive payment.

Sd/-.....

Headmaster,

Government Higher Secondary School,

Tittagudi, S.A. Dt.

PARTICULARS OF GOVERNMENT HIGH SCHOOL MARIAMMANKOIL

1) Name of High School : Government High School, Mariammankoil (613 501).

2) Student Strength :

VI	VII	VIII	IX	X	Total
222	146	109	128	66	671

3) Life Oriented Courses offered :

Name of courses	Std.	No.of pupils.
(*a*) Papier mache Doll Making	VIII	25
(*b*) Note Books manufacure	VIII	25
(*c*) Washing soap manufacture	VIII	24
(*d*) Scented Phenyl manufacture	VIII	18
(*e*) Fountain pen ink manufacture	VIII	17

4) Factors which weighed with the school in selecting the LOE : The availability of artisans helped the school authorities to select the above courses. The Parent Teachers Association of the school came forward to meet out the expenditure incurred towards the wages paid to artisans.

5) Experts involved in the preparation of curriculum and course materials : Thiru K· Ramalingam, Headmaster prepared the curriculum and course materials of the Life Oriented Course in consultation with the artisans.

6) Artisans engaged :-

Doll making	:	Thiru S. Shanmugam.
Note Books	:	Thiru S. V. Balaiyan.
Washing soap	:	Thiru T. Chandrasekaran.
Phenyl	:	Thiru K.Ramalingam, Headmaster.
Ink	:	Thiru K. Ramalingam, Headmaster.

7) Arrangement made for Practical training : Practical training in the manufacture of products is given in the School itself.

8) Details of raw materials etc :

Name of the course	*Raw materials used*	*Quantity prepared*
(*a*) Doll making	Plaster of paris powder, Sage powder, French chalk, Paper powder, Gum Arabic, paints, colour powders, Varnish.	40 Dolls
(*b*) Note Books	White paper, cotton thread, Card boards, Calico, Marble paper, sage powder.	192 Notebooks

	(*c*) Washing soap	Sodium silicate, oil, caustic soda, resin etc.	275 Kg.
	(*d*) Scented Phenyl	Pine oil, Soft Soap Oil	67 bottles.
	(*e*) Ink	Ink crystals, conc. sulphuric acid, glycerine, carbolic acid.	60 bottles.
9)	Value of finished products :	(*a*) Dolls	Rs. 100-00
		(*b*) Note books	Rs. 278-40
		(*c*) Soap	Rs. 2352-00
		(*d*) Ink	Rs. 360-00
		(*d*) Phenyl	Rs. 254-00
10)	Time allotted for theory and practicals of Life Oriented Courses	Six periods in a week for both practical and theory classes. (2 After-noons).	

(sd.).....

Headmaster,
Government High School,
Mariammankoil - 613 501.

Particulars on LOE

1. Name of the High/Higher Secondary School with Correct postal address : SEVA SANGAM GIRLS' HIGHER SECONDARY SCHOOL,
2, Williams Road, Cantonment,
TIRUCHI - 620 001.

2. Particulars of life oriented courses introduced :

Name of the Course	*Standard*	*Number of students offering the course*	*Date of introduction*
(i) Book Binding	VII	25	Ist week of September 1984
(ii) Tailoring (Dress Making and Embroidering)	VIII	65	-do-
(iii) Sandal paste, garland making, Beads and wires works and plastic paper works (polythene)	VIII	65	-do-

3. No. of periods per week allotted (The time table arrangement may be mentioned)	No.	Duration	Period of theory	Period of practicals
	5	4 p.m. to 5 p.m. daily	half an hour per day	half an hour per day

4. Names of persons who prepared the syllabus, their educational qualifications, designation and address etc.

Vocation 1 : Lower Technical Examination. syllabus is to be spread out for 3 years. (VIII, IX and X Standards).

Vocation 2 : -Do- (Lower syllabus in cutting and Dress making and in Embroidering to be studied in 3 years.

Vocation 3 : Syllabus not yet framed but this students are made to learn this craft in gradation.

5. Extimate of expenditure (Details to be given in a separate sheet) :

Recurring *Non-recurring*

Rs. 1000/- spent totally so far. The Vocation may be expanded as and when funds are available.

6. Arrangements made for doing practical work : Artisans are brought to the class rooms and practicals conducted in the class rooms.

7. Forging linkages with factories/production centres :

(i) Distance from the school to the workspot for each course. — TIRUCHI SEVA SANGAM PRESS is used for visits to learn the skills.

(ii) No. of teachers accompanying the pupils to the workspot — During the Vocational periods atleast 3 additional teachers are helping each set along with the instructors.

8. Product/outcome of the life oriented course and quantum per month. — Being beginners, students produce less. Wastage of raw materials is there.

9. Arrangements made for disposal or sale of finished products — Within the school among the students and teachers, the products are sold.

10. Approximate sale value of the product — Very nominal only.

11. Whether any incentives provided to students, If so, give details (for each course) — Students themselves purchase the raw materials from the teacher, produce and sell. They are allowed to enjoy the entire profit.

12. Evaluation procedure adopted — Practical Examination is to be conducted for the first time in March 1985.

13. Details regarding the registers and records maintained — Details of the raw materials purchased are recorded in a book. Stock registers maintained.

14. Role of PTA and other Service Organisations, voluntary agencies in the implementation of Life Oriented Education. — PTA has helped to purchase simple equipments for the Vocations in the form of Donation.

15. Monthwise expenditure incurred for each course.

Non-recurring	*Recurring*
Only initially nearly Rs.1000/- was invested for all the 3 vocations for both recurring and non-recurring things.	For Binding vocation Rs.100/- per month given as part-time salary.

(sd.).....
Headmistress

THAMBITHOTTAM HIGHER SECONDARY SCHOOL
GANDHIGRAM

Thambithottam Hr. Secy. School is one of the schools in Dindigul Educational District implementing the Life Oriented Educaion. This year, in our school, the scheme has been introduced in Standard VIII.

The following Crafts have been chosen for the purpose :

1. Book Binding
2. Fabrication (Metal Work)
3. Soap-making
4. Manufacture of Shakthi Malt and curry powder.
5. Dairying
6. Production of Bio-gas.
7. Agriculture
8. Pre-processing and spinning
9. Dyeing and printing
10. Siddha medicine preparation
11. Sewing and dress making.

The syllabi for the crafts have been drafted in consultation with the experts in the field and the teachers of our school.

167 students of Standard VIII including 68 girls have been divided into groups according to their choice of the crafts and they are being sent to the various work units twice a week to have practical training in the respective crafts.

In this connection an orientation course has been conducted for the teachers and the heads of work units by the Gandhigram Trust under the Chairmanship of Sri V. Padmanabhan, the Managing Trustee of Gandhigram Trust.

(Sd.) **B. Lalithambika Devi**
Headmistress,
Thambithottam Hr. Secy. School,
Gandhigram.

SRI RAO BAHADUR A.K.D. DHARMA RAJA BOYS' HIGH SCHOOL RAJAPALAYAM

Our school has introduced 'Life Oriented Education Scheme' on an experimental basis. The following deliberation were made :-

1. To acquire the technical knowhow.
2. To provide funds.
3. To find out the proper way of implementing the instructions.

To acquire the technical knowhow the crafts selected should be of such nature, to be possible to start with a small capital and to develop into a highly proficient industry as and when the financial position of the training improve.

Thus we decided to select one pertaining to Agriculture and three to industrial on trial basis, with the intention of introducing more number of suitable crafts after successfully implementing these four crafts.

The Agricultural trade so selected is of the nature where a person with the minimum of land must be capable to start this later. Growing of Azolla, Mushroom & fruit preservation were decided upon.

These can be implemented with a small investment of approximately Rs. 10/-. This training would help later in educating the rural mass to achieve green revolution.

From Madurai and Coimbatore Agricultural Universities, the know how were obtained

Industrially, we decided to take up 1. Book and Note Book binding, 2. Plastic works and 3. Electronics.

The former two could be strated with about Rs. 100 whereas the last one with about Rs. 10,000 minimum.

The advantage of all the three trades are as follows :-

In every stage of learning remuneration is possible.

Every stage of learning is comprehensive as an individual trade.

To Explain

Binding in its simplest form will enable the trainee to earn some money during his holidays to meet the requirements such as paying fees and buying stationery items.

After learning it thoroughly they could obtain employment or practice it as a trade part-time/full time. It could even develop into a full fledged binding section.

Plastic work can also, in the initial stage making of signs and badges would fetch some income. It also could develop into owning hand operated or automatic machinery as and when funds are available.

After training, an electronic technician could earn a living by repairing and maintaining electronic gadgets. If financially sound he could assemble and sell gadgets.

We availed the help of an ex-serviceman who is knowledgeable in many trades, in the implementation of the first two trades and a local artisan in the electronics.

A number of boys have learnt the first stage of book binding during the last three months and a few of them are earning as and when they got time.

Twelve boys have been initiated into the field of plastics.

In electronics eight boys are undergoing training. Forty six boys are learning and agriculture based craft ten are getting trained.

Our school Secretary has promised to buy Azolla produced in our school during 1984-85. He has also promised to help us in marketing Mushroom as and when it grows through Lions Club and Rotary Club of Rajapalayam. Mushroom and Azolla are growing in our Craft section. The Headmaster is in charge of Agriculture based crafts.

It is worthy to mention here that the boys in binding section have bound the books of most of the school community and earned Rs. 460/-

Our intention for the future is to select more numbers of such trades and bring out booklets and brochures containing training programme, Impart training not only to the students of our school but also to all those who are desirous of learning these trades.

In considering these trades the most important factors are getting the raw materials for production/working upon, and marketing the finished goods.

Finance till date we have managed with the hearty assistance of Shri Dharma Krishna Raja, our school Secretary. The Managing Trustee, Sri Rao Bahadur A.K.D. Dharma Raja Education Charity Trust has sanctioned Rs. 1,000/- as interest free loan. We will be able to repay the loan before March, 85. Moreover the Managing Trustee has generously consented to donate one Television set and one Tape Recorder to our School Electronic section.

For the future ambitious programme the department of Education should come forward to assist us financialy, in our procurement of raw materials and in marketing of our finished goods.

(Sd.) .....
Headmaster,
Sri Rao Bahadur A.K.D. Dharma Raja
Boys' High School, RAJAPALAYAM.

HARBOUR HIGH SCHOOL, TUTICORIN

Tuticorin Port Educational Agency, the managing body of the Harbour Schools has introduced the Chief Minister's Scheme of Life Oriented Education in the Harbour High School on 16-7-84 with the approval of the Director of School Education, Madras.

The Scheme has been implemented for students of Std. VI in the following disciplines.

	Courses offered	*No. of students*	*No. of hours allotted* *Theory*	*Practical*
1)	Repair &Maintenance of automobiles.	17	4 hrs.	2 hrs.
2)	Repairs & Maintenance of electrical appliances	21	1 hr	5 hrs.
3)	Carpentry & wood work	18	2 hrs.	4 hrs.
4)	Sewing & Dress making	53	1 hr.	5 hrs.

The syllabi for the above disciplines have been framed by eminent doyens in the respective fields and approved by the Director of School Education, Madras.

Classes are conducted on 6 days a week from 5 PM to 6 PM. qualified and experienced Engineers of Tuticorin Port Trust take classes and experienced Artisans guide the students to do their practicals. Students are supplied with cyclostyled notes periodically. Log books are maintained regularly.

An Honorarium of Rs. 25/- and Rs. 15/- per day is paid to the Engineers and Artisans respectively. The Sewing Mistress of the School and a part-time sewing teacher are paid Rs.5/- per day. The Headmaster and the Arts Teacher are paid Rs. 5/- per day each for coordination work.

Our students have been permitted to be trained in the Port's full-fledged automobile workshop. Regarding Repair and maintenance of electrical appliance, practicals as well as theory classes are conducted in the school itself. Regarding Carpentry and wood work, theory classes are conducted in the school and practical classes in a temporary workshop nearby. Classes in Sewing and Dress making both theory and practicals go on in the School itself. Necessary arrangements are being made to construct three separate sheds for the above deciplines in the school premises.

The Scheme is carried on successfully in our school and the students evince great interest. It is sure that this scheme, if properly implemented, will benefit the future generations of Tamilnadu.

(Sd.).....
Headmaster,
Harbour High School,
Tuticorin - 4.

DEVASWOM HIGHER SECONDARY SCHOOL, MONDAIKAD, KANYAKUMARI Dt.

Devaswom Higher Secondary School, Mondaikad, is run by H.R. & C.E. Department of Government of Tamilnadu. It is situated in Kalkulam Thaluk in Kayakumari District and it comes under the jurisdiction of Thuckalay Educational District.

The strength of the school is 501 as shown below :

Std.	XII	XI	X	IX	VIII	VII	VI
Boys	17	39	36	46	46	48	52
Girls	28	17	36	41	39	23	33
Total	**45**	**56**	**72**	**87**	**85**	**71**	**85**

We are fortunate enough to have 5 handlooms and a Weaving Instructor, a sewing Mistress and a Drawing Master all full time Teachers.

The L. O. E. Committee met on 9.8.1984 and selected the following courses to be taught to the students of Std. VIII as detailed below group wise.

	Boys	*Girls*
Weaving	14	—
Dress-making and Embroidery	—	39
Painting	14	—
Note Book Making	18	—

Parent-Teachers Association :

Two unused rooms of adjoining temple of the management body were repaired by Parent Teachers association at the cost of Rs. 600/- so as to be used as LOE store rooms.

Syllabus :

The syllabus prescribed by the Director of Government Technical Examination for Lower Grade Examination is followed. Though minimum qualification prescribed in it is Std. X passed or failed, there is no problem, as the Technical Examination falls on November every year all the Students may Qualify themselves.

Artisans / Craftsmen :

The only outside help we wanted is in the note book making and that know-how too was got economically on a contract basis. Fee for 4 classes at Rs. 12/- a day was given to an artisan of Regal Press in Monday-Market, at a distance of 5 K.M. We

sent the boys in group of 15 and the bus fare was not so high and it came only to Rs. 60/- for 4 batches.

Practical classes were done during out of school hours and holidays.

Raw materials :

Supermarket was approached and concessional clothe was purchased for Rs. 500/-

Some rare articles like useless Gramaphone records etc were bought to be painted and sold,

The cost of the plain paper is high in the open market.

Fees :

The accumulated special fee of Rs. 4463/- is diverted for LOE.

Expenditure :

The details of expenditure incurred in this connection is as follows :

1. The question of salary of Part Time Teachers does not arise as no such one was appointed.

2. Recurring expenditure to the tune of Rs. 1744/- was spent on raw materials as follows :

August	1984	985.00
September	1984	712.00
October	1984	47.00
November	1984	..
December	1984	..
January	1985	..
Total	Rs.	**1744.00**

3. Non-Recurring Expenditure :

Two Sewing Machines with accessaries were bought for Rs. 2674/-. Scissors, drawing boards, brushes and other instruments for Rs. 186/-.

4. The value of finished articles has risen upto Rs. 1500/-. The finished articles were sold for Rs. 523/- to the STUDENT CO-OPERATIVE STORE, K.V. No. 68 to avoid Sale Tax and other problems. As the funds in the Co-operative store is low, the remaining finished products are kept aside to be sold when the finance position brightens up.

The L O E committee decided to pay 20% of the net profit as an incentive to the teachers and students but they refused to accept this so as to improve the finance first.

All the eight periods and Craft periods are used for theory and out of school hours and holidays are used for practicals.

The incentive may be given to the students with a request to save it in the school sanchayika account.

Thus there may be a process of co-ordination in the school among the Students Co-operative store, the small savings scheme and the School organisation.

The idea of Self-reliance, self-financing and advantages of Co-operative movement and dignity of labour may be inculcated in the pupils.

(Sd.).....

Headmaster,

Devaswom Higher Secondary School,

Mondaikad.

GOVERNMENT HIGHER SECONDARY SCHOOL, KILPENNATHUR

We feel proud and happy to mention that Honourable Chief Minister's Scheme of Life Oriented Education is being implemented in the school from 1984-85.

In the begining we formed a Committee consisting of our teachers and the President of the Parent-Teacher Association to decide upon the proper courses for implementation. The committee after careful consideration of the several factors like sources, availability of atisans and demands of the society, recommended two courses, Coir-Work and Mat-weaving for implementation during 1984-85. It also suggested to intensify the existing courses, Wood-work and Weaving in the school syllabus.

We have taken up this year the pupils of VIII Standard for our experiment. The strength of this standard goes beyond 150. So they are devided into four groups each group taking one course. Each group in turn is sub-divided and engaged in various stages of the practical work. Generally pupils are given practical training only in the out of school hours from 4-30 to 5-30 p.m. each day without dislocation of normal work.

We decided to utilise the services of the instructors available in this institution and also sought the assistance of two local artisans for guidance and instructions. The recurring and non-recurring expenditures for the purchase of raw materials and equipments for the courses are met from the Special Fee Funds of the School. One set of Spinning Wheel and a set of mat-weaving loom have been purchased and installed.

Intensive training for the pupils is arranged for each day by the instructors and artisans with more emphasis on the practical aspect of the course. It is encouraging to note the pupils show more interest and enthusiasm in learning and acquiring the skills expected of the courses.

At present, the finished products, different kinds of coir-products and mats of different sizes are sold out among the pupils and staff of the institution. We personally feel proud to say that our demonstrations of coir-work and mat-weaving at the public exhibition held in Tiruvannamalai town during the Karthigai Festival two months back attracted the public very much. The reaction of the public does encourage our children.

The introduction of the Higher Secondary courses and Vocationalisation of the same provide better opportunities for Higher studies and employment for those who complete the courses. Now we are of the opinion that the proper implementation of our Honourable Chief Minister's Life Oriented Education in all the schools shall yield fruits, instil faith and self-reliance in the minds of the younger generation and provide a better living even for those who drop out in the middle of the School course.

(Sd.).....
Government Higher Secondary School,
Kilpennathur (N.A. Dt.)

NEELAMBAL SUBRAMANIAM HIGHER SECONDARY SCHOOL, SURAMANGALAM (SALEM 636 005)

(1) Name of the School : Neelambal Subramaniam Higher Secondary School, Suramangalam, Salem (636 005).

(2) Student's strength, Classwise during 1984-85 :

Stds.	*Boys.*	*Girls*	*Total*
VI	271	148	419
VII	258	93	351
VIII	226	78	304
IX	274	56	330
X	139	72	211
XI	251	36	287
XII	225	30	255
Total	**1644**	**513**	**2157**

(3) Life Oriented courses offered - Standard in which introduced - Number of students involved :-

	Course offered	*Std.*	*No.of students* *Boys*	*Girls*
1.	Dress making	VIII	—	30
2.	Embroidery Work	VIII	—	30
3.	Wire Bag making	VIII	—	21
4.	Welding	VIII	20	—
5.	Plumbing	VIII	21	—
6.	Printing	VIII	21	—
7.	Book Binding	VIII	19	—
8.	Blue Print taking	VIII	21	—
9.	Suit Case Making	VIII	20	—
10.	Commercial Arts	VIII	21	—
11.	Fitting	VIII	21	—
12.	Public Addressing System & Projector operation	VIII	21	—
13.	House Wiring	VIII	20	—
14.	Pipe and Rod Bending	VIII	22	—

(4) Factors which weighed with the school in selecting the Life Oriented Courses - Support received from the Parent-Teacher Association/Service Organisations :-

These courses can be easily introduced in our School. Facilities for training are available in and around our school. The experts available in the area for giving training to the pupils will be used. The pupils may be taken to nearby Workshops and Work Spots for future training. We have to divide the classes into sections taking into account, the aptitude and interest of the boys and girls.

The Parent Teacher Association is very eager to help the School for these courses.

(5) Experts involved in the preparation of curriculum and course materials for the Life Oriented Courses :-

Name of the Experts	*Courses*
Thiru N. Nagarajan, B.A.,B.Ed., Drawing Master, N.S. Higher Secy. School, Suramangalam, Salem-636 005.	Blue Print taking and Commercial Arts.
Thiru P. S. Rajaram, (Electrician, Thiruvalluvar Transport Corporation, Salem - 7.	House wiring and Plumbing.
Thiru K. Muthumanickam, D.M.E., Part-time Teacher, N.S. Higher Secy. School, Suramangalam, Salem - 636 005.	Welding

(6) Artisans / Craftsmen engaged for teaching the Life Oriented courses :-

Name of the Artisans / Craftsmen		*Courses*
Tmt. Manoranjitham	...	Dress Making & Wire bag making
Tmt. Jeyakodi	...	Embroidery work.
Thiru. Chinnathambi	...	Welding
Thiru. C. Thangaraj	...	Plumbing
Thiru. V. Mahendran	...	Printing
Thiru. Rajamanickam	...	Rod & Pipe Bending.

(7) Expenditure incurred on running the Life Oriented Courses under the following heads for each Life Oriented Course :-

1. Salary of Part-time Teachers (Rate of each and Number appointed).	Rs. 150/- p.m. 14 Teachers.
2. Recurring expenditure (monthwise).	Rs. 400/- p.m. (Rs. 2400/- from August 84 to January 1985).

(8) Time allotted for Theory and Practical for doing the Life Oriented Courses.

For Theory ... 2 periods.
For Practicals ... 6 periods.

(Sd.).....
Headmaster,
Neelambal Subramaniam Higher Secy. School,
Suramangalam, Salem - 636 005.

GOVERNMENT HIGHER SECONDARY SCHOOL, MATHUR, DHARMAPURI. 635 203

In consultation with the Parent - Teacher Association and Vocational Committee, Vocational area is determined to introduce the following "Life Oriented Education" courses in the school under the Honourable Chief Minister's scheme of Life Oriented Education in Schools. They are,

1. Palm Products.
2. Tailoring and Embroidery.
3. Drawing and Painting.
4. Cycle Repairing.

The object of introducing these courses is to provide opportunities to pupils to work with their hands and develop proper attitudes towards manual labour. The Courses are being offered to VIII Standard pupils from 25 - 6 - 1984.

A Committee is formed for framing syllabus and curriculum. Syllabus suited to the area and skills of the pupils is prepared. According to the syllabus four periods per week for theory and four periods per week for practical have been allotted, It is proposed to give more importance to the practical training of the pupils. At the end of the year, examinations both in theory and in practical will be conducted.

As far as the Palm products Course is concerned, the Government Palm Industry at Mathur helps to train the pupils in Palm Products. They are sending an instructor daily to the school and for the practical purpose the boys are being taken to the firm itself. Raw materials are supplied by the firm and the finished articles are taken back by them, Hence, there is no problem of marketing. Within a short period of six months, the pupils have developed their skills to the extent that they can make waste paper baskets, office tray, school bags and brushes with their hands.

Pupils bring cloth and needles themselves for the Tailoring and Embroidery Course. They are now able to cut shirts and Petty coats. In future they will become good tailors and artisans and they can earn easily Rs 10/- per day.

A mechanic from a local Cycle shop comes to the school to teach Cycle repairing. Often the students are taken to the local cycle shops to get practical knowledge.

The question of paying remuneration to artisans and part-time teachers has not arisen in this school so far due to the following reasons. The local Palm Industry under the Management of Tamil Nadu Khadi Board has

volunteered to give training to the pupils deputing the trained personnel employed in the Industry. The craft teacher of this school handles Tailoring and Embroidery. Two sewing machines have been newly purchased at a cost of Rs. 2,363/- for the Tailoring Course. The Art Teacher of this school is in charge of the pupils learning Drawing and Painting A Cycle mechanic from a local Cycle shop offers his voluntary service for teaching cycle repairing. The members of the Parent-Teachers Association are more interested in this scheme and they will do any help for the success of the scheme.

At present incentives are not given to pupils since it is a skill developing stage of the pupils. After having acquired the skills better, they can produce articles which can compete in the market in due course they can earn while learning.

Sd/.....
Headmaster,
Government Higher Secondary School,
MATHUR - Dharmapuri.

SAKTHI HIGH SCHOOL, SAKTHINAGAR.

1. Name of High/Hr. Sec. School .... Sakthi High School, Sakthinagar, Bavani Taluk, Periyar Dt.

2. Students strength, classwise, during 84–85. ....

Std.	Boys	Girls	Total
VI	80	56	136
VII	90	68	158
VIII	117	42	159
IX	95	66	161
X	81	31	112
TOTAL	463	263	726

3. Details of Arts & Crafts teachers availabls in the school. .... Men : 1 Women ; 2.

4. Life Oriented course offered - Standard in which introduced Number of students involved. ....

VIII Std.	Boys	Girls	Total
	117	42	159

5. Factors which weighed with the school in selecting the Life Oriented courses - support received from the Parent Teacher Association/Service Organisations. .... Factories and industries in and around the school. All the necessary support is given by the management.

6. Experts involved in the perparation of curriculum and course materials for the Life Oriented Courses. .... The principal and staff of the Sakthi Institute of Technology, staff members of V. M. K. Hospital and some officers of Sakthi Sugars Ltd., Sakthinagar.

7. Artisans & Craftsmen engaged for teaching the life oriented courses. .... Workshop Instructors - Sakthi Institute of Technology.
Staft Nurses - V. M. K. Hospital.
Khadi Sarvodhaya Sangam - Spinning unit Nachimuthupuram.
Auto workshop - Sakthi Sugars Ltd.
Horticulture - Sakthi Sugars Ltd.,
Sewing, Agri - Sakthi High School Sakthinagar.

8. Arrangements made for giving practical training - practical classes arranged. .... Sakthi Institute of Technology.
Dr M. K. Hospital
Auto workshop
Khadi sarvodhaya sangam spinning unitd

9. Details to be given in brief about the raw materials supplied-quantity and number of students consuming to be given.	—	Raw materials are supplied free of cost by the concerned institute itself for time being.
10. Expenditure incurred on running the Life Oriented course under the following head for each Life Oriented course.		
(i) Salary of Part-time teacher-rate each and number appointed to be given.	....	Rs. 10 per class.
(ii) Recurring expenditure-month-wise.	....	Rs. 320/-
(iii) Non-recurring expenditure-Item newly purchased-donated to be given.	....	2 Sewing Machines donated by the management.
11. Time allotted for theory and practical for doing the life Oriented course.	....	Theory : 1 Period Practical : 3 Periods. } 5 Hours.

KADRI MILLS HIGHER SECONDARY SCHOOL, ODDARPALAYAM

1) Name of the Hr. Secy. School with correct postal address. — Kadri Mills Hr. Secy. School, Odda palayam, Ondiputhur P. O. Coimbatore-16.

2) Particulars of L. O. E. Courses introduced

Course	Std.	No. of students
1) Vocation Training in Spinning & Reeling	8 Std. & 9 Std.	81
2) Vocational Training in Assembiy of Amber Charts assembly of looms IRIS.	—	18
3) Cine Theatres Projector Operation at K. G. Complex	—	4
4) Telephone Operation at Kadri Mills	—	2
5) Time Office Work at Kadri Mills	—	5
6) Store room maintenance at Kadri Mills	—	6
6) Special Coaching In Games	—	32
8) Gardening	—	43

3) Names of persons who prepared the syllabus their educational qualification design and address (a copy of the syllabus enclosed). — by Technical staff in the concerned units-syllabus enclosed.

4) Particulars of instructors and rate of remuneration. — For the time being the technicians at the places of work are conducting theory classes and also help them, learn the actual warking. The management is planning to give honorarium to those instructors at the end of the academic year.

5) Arrangements made for doing practical work. — The managements of the concerned units has agreed to admit these pupils during the said dates and hours to learn the work at various departments.

6) Forging linkages with Factories/production centre. — Kadri Mills (CBE) Ltd., Oddarpalayam, IRIS. Engg. Works, Ondiputhur.

7, Distance from the school to the workspot	—	Kadri Mills, adjoin the school. IRIS—1 Kilo metre, K.G. Complex, 8 K.M.,
8) Arrangements made for taking the pupils to the workspot for each course (if sent in batches, size of each batch.)	—	at their own expenses to K.G Complex.
9) No. of teachers accompanying the pupils to the workspot.	—	First Asst. accompanys once in a week to the workspot.
10) Whether the raw-materials for practical work are provided by the school itself or by the factory themselves.	—	Factory themselves.
11) Whether any incentive is provided to the student If so give details.	—	The concerned management is to supply them a cup of tea with biscuits daily.
12) Sources of funds for meeting the expenditure.	—	The concerned firms bear the cost of raw materials.

Sd. .....
Headmaster, Kadri Mills H.S. School,
Oddarpalayam.

ARIGNAR ANNA
GOVERNMENT HIGHER SECONDARY SCHOOL, COONOOR

COONOOR TALUK, NILGIRIS DISTRICT

The strength of the school is 966 as detailed below :-

VI Std - 241, VII STD - 154, VIII Std - 143. IX STD - 166

X STD - 118, XI STD - 85, and XII STD - 51.

The school is already having weaving as craft. In '84-85 Tailoring, Tea chest manufacture, Plastic wire manufacture and Hanger manufacture have been introduced in VIII Std. Totally 143 students have been involved in these five courses.

A Committee consisting of 12 members was set up and it prepared the curriculum to be followed only in 1984-85. All craft and art Teachers and other Lady Teachers took great initiative in this matter and only because of their co-operation the Courses are being run successfully. No other part time Teacher is engaged.

A set of boys were made to learn the handling of tools in the trade of Tea Chest making in the local companies where Tea Chest are manufactured in a large scale. Lady Teachers taught the Art of making plastic wire bags and Flower vases. So far some 50 wire bags and flower vases have been made by the students. All these items have been auctioned in the school itself. A sum of Rs. 143/- has been earned as profit. The amount is being used for the purchase of raw materials which are available locally. As for Tailoring a sewing machine has been bought with a sum of Rs. 700/- as donation from the P.T.A. The Engineering Attender is helpful in the manufactnre of hangers. No special fee, other than the usual special fee has been collected.

In weaving, towels and bed sheets are woven. The products are auctioned in the school itself.

6 periods have been allotted for the courses. For weaving and sewing 3 periods are allotted for theory and 3 for practicals. For other courses all the 6 periods are allotted for the practicals.

From 1985-86 onwards the Trades will be taught, by engaging well trained artisans in the respective trades. The Headmaster and the Staff find the L.O.E. Course useful to the students communities.

Sd. .....
(Headmaster)

GOVERNMENT HIGHER SECONDARY SCHOOL FOR GIRLS DHARMAPURI.

1. Name of the High/Higher Secondary School with correct postal address (with pin code) : Govt. Higher Sec. School for Girls, Dharmapuri. 636 702.

2. Particulars of Life Oriented courses introduced :-

Name of the Course	Standard	No, of students offering the course
Printing	VIII	35
Book Binding	,,	43
Food preservation	,,	36
Nursing	,,	87
Radio Repair and Maintenance	,,	45
Handicrafts	,,	93
Dress Making	,,	42

3. No. of period per week allotted	No.	Duration	Period of Theory	Period of Practical
	10	45 Minutes each period	4	6

4. Names of persons who prepared the syllabus, their educational qualifications, designation and address etc.,

Name and address	Designation	Educational Qualifications General	prof.	Technical
Thiru. Jambulingam	Press Owner	....	....	Part
Tmt. Andal	Binder	....	....	time
Tmt Valamathy	Food Preservation	....	....	Instr
Selvi. Santhi	Nursing	....	....	uctor
N. Palani	Radio Repair	....	....	
Selvi. Aruna	Handicrafts	....	....	
Tmt. K. Jayalakshmi	Sewing Mistress	....	....	

5. Details of raw materials simple equipments and tools purchased / provided : Sewing Machine, Stove, stainless steel vessels.

6. Estimate of expenditure :

S. No.	Name of the Course	Item of Expenditure Recurring	Non-recurring
		Rs.	Rs.
1.	Food preservation	956-65	1000-00
2.	Printing	1760-25	--
3.	Book Binding	1358-45	3372-00
4	Handicraft	1760-25	1000-00
5.	Dress making	401-80	1500-00
6.	Radio, Tape recorder Maintenance & Repair	1358-45	1000-00
7.	Nursing	1760-45	1000-00
	Total	9356-10	8872-00

7.	Arrangements made for doing practical work.	Pupils go to press along with the teachers.
8.	Forging linkages with factories / production centres.	Printing presses
	(i) Distance from the school to the workspot for each course.	Very near to school
	(ii) Arrangements made for the transportation of the pupils to the workspot for each course, If sent in batches, size of each batch.	2 batches in 17 each
	(iii) No. of teachers aocompanying the pupils to the workspot.	2 teachers.
	(iv) Whether the raw materials for practical work are provided by the school itself or by the factories themselves.	By the press.
9.	Evaluation procedure adopted	Examinations will be conducted for both theory and Practical.

10. Monthwise expenditure incurred for each course

Month	Non-recurring	recurring	total
NIL Expenditure met by the Students.			

11. Source of funds for meeting the expenditure	School fund account	Donation	
		Amount	Raw Materials
Expenditure met by the Students.			

Sd /-
Headmaster.

GOVERNMENT HIGHER SECONDARY SCHOOL, POO NAMALLEE, MADRAS

INTRODUCTION

We introduced Life Oriented Education in Std VIII. There are 318 pupils studying in Std VIII in our school. We have introduced the following 8 life oriented courses from August 1984. There are 8 Craft Instructors and 7 pre-vocational Training Centre staff. There are 8 courses in our school. We have not engaged any outside staff, but utilising the existing staff of our school.

Name of the course	No. of students offering the Course
1. Wood based industry	 45
2. Toy making	 48
3. Domestic wiring	 40
4. Brick making	 18
5. Metal moulding	 35
6. Pipe fitting	 45
7. Gardening	 55
8. Auto servicing	 32

We have already spent Rs. 3000 from the Amenity Fee fund, covering all the courses for the purchase of raw materials and some simple tools.

Our experienced Art and Craft teachers in consultation with the production Managers of Brick industry and the Instructors of ITI, Ambattur prepared the syllabi for the year 1984-85.

This Scheme has been introduced in Std VIII and all the trades are taught during the 7th and 8th periods. Four periods for theory and six periods for practical have been allotted in a week.

Raw materials like clay and wood are being supplied and they are converted into toys, bricks, switch boxes, wooden trays and shelves.

The monthly recurring expenditure for the craft put together would be approximately Rs. 2000. Rs. 1000 have been spent for the purchase of tools.

Finished products like trays, bricks, dolls etc. were sold among boys with no profit basis. The sale proceeds would come around Rs. 500.

The Headmaster,
Govt Higher Secondary School
Poonamallee, Madras-56.

St. JOSEPH'S HIGH SCHOOL, VENKATAKULAM, PUDUKKOTTAI DISTRICT

1. Name of the High/Higher Secondary School with correct postal address — St. Joseph's High School, Venkatakulam - 622 310 Pudukkottai District.

2. Particulars of Life Oriented courses introduced :

Name of the Course	Standard	Number of students offering the course
Typewriting & Shorthand	VIII	21
Tailoring	VIII	32
Basket Making	VIII	15
Sericulture	VIII	15
Accountancy & Commerce	VIII	16
Mat Making	VIII	26

3. No. of periods per week allotted is 10

	No. of hours	period for theory	Period for practicals
	6-15	1 Hr	5.15 hrs
	Boys	Girls	Total
4. Typewriting and Shorthand	18	5	23
Tailoring	26	6	32
Basket making	—	15	15
Sericulture	15	—	15
Accountancy and Commerce	16	—	16
Mat making	22	4	26
Total	97	30	127

5. Particulars of Instructors and rate of remuneration :

Name	Edl. Qualifications and years of experience in the subject field	Name of course	No. of periods handled within school hours	No. of periods handled outside school hours
1. Selvi R. Alphonse Mary	TTC	Tailoring and Basket Making	3.45	3.30
2. Thiru M. Kulandaivelu		Sericulture	3.45	2.30
3. ,, G. Rajendran	MSc. B.Ed 6 months	Typewriting & Shorthand	3.45	2.30
4. ,, L. Arokyasami	B.Com 6 months	Accountancy & Commeice	3.45	2.30
5. ,, Maria Michael		Mat making	3.45	2.30

6.	Product outcome of the life oriented course & quantum per month	Basket 3	Mat 3	Silk 12 kgs
7.	Arrangements made for disposal or sale of finished products	The finished baskets and mats are being sold to the students by auction		
8.	Approximate sale value of the product	Rs. 425/-		

Sd.....
Headmaster & Correspondent.

Statistical Particulars on the Experimentation of the Chief Minister's Scheme of Life Oriented Education in School System.

1.	Name of the Revenue District	Pudukottai
2.	Name of the Educational Dist	Arantangi
3.	Name of the High Higher Secondary School with full postal address	St. Joseph's High School Venkatakulam-622310 Pudukkotai District.
4.	Name of the Headmaster along with his general educational & professional qualification	Rev. Fr. I. Arokiasamy, M.A., M.A., M.Ed.

5. Name of life oriented courses introduced in the school and date of introduction of the course :

Date of introduction	Names of the courses	Std.	No. of students	
			Boys	Girls
31 - 8 - 84	Typewriting & shorthand	VIII	20	1
,,	Tailoring	VIII	20	12
,,	Basket Making	VIII	—	15
,,	Sericulture	VIII	15	—
,,	Accountancy and Commerce	VIII	16	—
,,	Mat making	VIII	22	4

Sd.....
Headmaster.

A WORD OF THANKS

My gratitude to our esteemed Chief Minister Dr. M. G. Ramachandran, Finance Minister Dr. V.R. Nedunchezhiyan, Education Minister Thiru C. Aranganayagam, Chief Secretary Thiru K. Chockalingam, Finance Secretary Thiru C. Ramachandran and Education Secretary Thiru T. D. Sundar Raj, for their encouragement and guidance for drawing up plans for reshaping school education; and to Dr. Malcolm Adiseshiah, Former Deputy Director General, UNESCO, Thiru N. D. Sundaravadivelu, Former DPI and Vice-Chancellor, Madras University, Prof. G. R. Damodaran, Director, PSG Institutes, Coimbatore, Vice-Chancellors, Dr. V, C, Kulandaisamy (Anna University) Dr. M. Aram, (Gandhigram) Thiru S. V. Chitti Babu (Annamalai Univetsity) Thiru P. S, Manisundaram (Bharathidasan) and Dr. R. Subbaiyan (Bharadhiar) and to Thiru V. Karthikeyan, Chairman Planning Commission, Thiru N. Mahalingam, Industrialist, Thiru T. S. Avinasilingam and Dr. Rajammal P. Devadass, Shri Avinashilingam Educational Trust, Coimbatore, Thiru V. Padmanaban, (Gandhigram), Dr. W. A. F. Hopper, NCERT, Thiruvalargal Ramakrishnan and Srinivasan of the Board of Apprenticeship Training, and the Directors of Technical Education and Medical Education Deans and Professors of the Agricultural University, Medical College and Madras University, Principals of College of Arts and Crafts and Music College, the Heads of other collaborating Institutions and Service Organisations and to the Chairmen and Members of the Syllabus Committees for their valuable contribution in the preparation of the Blue Print for the Chief Minister's Scheme of Life Oriented Education.

My thanks are due to officers and staff of the Directorate of School Education and SCERT, especially, Thiruvalargal A. Muthukrishnan, T. Natchimuthu, M. Sivathanupillai, V. S. Subbaraman, P. Radhakrishnan, V. P. Devasitham, K. Ramanathan, V. Natarajan, O. Karuppathevan, R. Nelson Jeyaseelan, S. Rajamanickam, B. Jegannathan, P. Karunakaran and P. Balakrishnan and to the Chief Educational Officers, District Educational Officers, Inspectors and Inspectresses of schools who are involved in the organisational work and to the Headmasters, Headmistresses, teachers, craft instructors and members of the Parent Teacher Associations who are implementing the Pilot Projects with considerable effort and initial success.

The Reports of the Kothari Commission, Dr. Nayudamma Committee, Ishwarbhai Patel Committee, NIEPA, NCERT and the systems in USSR, JDR, GDR, UK, USA, JAPAN, SRI LANKA, CHINA, VIETNAM and S. KOREA as seen in UNESCO Documents served as useful materials for formulating the scheme.

J. A. RYAN.

ERRATA

Page No.	*Paragraph No.*	*Line No.*	*For*	*Read as*
2	1.7	4	Elementary or Middle	Secondary
2	1.8	8	The sort of	This sort of
3	1.12	1	Inudstry	Industry
3	,,	14	inportance	importance
3	1.13	Title	LEVELS OE	LEVELS OF
3	,,	5	appoximate	approximate
3	,,	15	requirded	required
4	1.14	19	wherefor	wherefore
7	2.2	4	codsidered	considered
7	2.3	11	acquaint to	acquaint the
7	2.3	17	programme	programmes
9	3.1	14	citizenahip	citizenship
9	,,	24	enviroment	environment
9	3.2	12	(Annexvre)	(Annexure)
10	3.3	4	mauipulative	manipulative
10	,,	16	spceial	special
10	3.4	2	primery	primary
10	,,	4	curriculam	curriculum
10	3.5	Title	,,	,,
10	,,	26	msnipulative	manipulative
10	3.6	1	Tne	The
,,	,,	,,	rhe	the
11	3.9	2	scocial	social
11	,,	4	campulsory	compulsory
11	,,	19	syllabuses	syllabi
13	4.1	12	himeself	himself
13	4.2	7	rhythem	rhythm
15	4.12	16	usefull	useful
15	4.16	5	trainning	training
16	4.17	22	masonry	masonary
17	4.18	17	domestric	domestic
17	4.21	1	Students	Student
17	,,	4	acceptenace	acceptance
19	4.23	18	math	mutt
19	,,	22	function was	functionaries
19	4.24	2	services and	vocational courses of four years duration
19	,,	3	The assistance of experts may be designed	——(omit)
19	,,	5	loading	leading

19	4.25	Title	SECONDARY SCHOOL EDUCATION	SECONDARY EDUCATION
19	,,	2	vacationalised	vocationalised
19	,,	17	organixation	organisation
20	4.28	16	heat or energy	heat energy
20	4.29	1	thet	that
21	4.32	2	learner	learner's
21	4.35	18	practicioners	practitioners
23	4.40	9	oourses	course
23	4.41	7	tee	the
23	4.42	3	establisbed	established
24	4.46	9	Nusery	Nursery
26	5.0	6	Thiur.	Thiru.
26	,,	12	disscussions	discussions
27	5.2	15	curriculam	curriculum
,,	,,	58	,,	,,
28	5.5	14	,,	,,
29	5.7	11	(annuxure)	(annexure)
29	,,	15	phamplet	pamphlet
30	5.8	42	havo	have
30	,,	43	SERT	SCERT
30	5.9	7	cosidering	considering
30	,,	14	whic	which
31	5.11	21	prapare	prepare
34	6.1	13	slected	selected
35	6.3	6	availble	available
35	,,	12	taachers	teachers
35	6.4	2	fecilities	facilities
36	6.9	6	Arrangments	Arrangements
38	7.3	10	Carrer	Career
39	8.2	2	require that	require
42	Estimate	1	——	(IN CRORES)