

P A R T I V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY AND CONCLUSION

It is summarised and concluded from the survey and from the available literature that instruction in Home Science developed out of a concern for the everyday living of people as it is really concerned with the activities related to the development of persons individually and in family groups. These activities include social relationship in groups of all sizes, management and use of resources - both human and material - and protection of health.

This way instruction in Home Science contributes the vocational development of individuals through vocational guidance and education for gainful employment within the areas allied in Home Science.

Because instruction in Home Science reflects a concern for the physical well-being of people and for the social, economic and political conditions that affect them, Home Science is closely tied with physical, biological and social sciences.

Early research work in Home Science was concerned with studies of clothing, household equipments, food,

furniture and textile so now a change on the emphasis on such research is needed. Now the homes in which the people live have been emphasised and recognized as a focal point so research pertaining to this aspect is lacking. Prior to 1940, very few researches were carried on in the field of Home Science education. The major reasons given for this activity were non-availability of funds at the federal, local and State levels for the purpose.

Since last few years only there has been an increase in small studies in different disciplines of Home Science and as far as its related fields are concerned. These studies are done by the post-graduate students and the post-graduate teachers but the school teachers have not yet shown interest in action research due to lack of funds, facilities, training in different know-how of the research methods and so on.

In U.S.A. Home Science had its early beginning in 1798 when needle work was introduced in the elementary schools and secondary schools. Later on, cooking was introduced in the public schools after 87 years of gap. At about the same time adult education for domestic workers and wives was introduced and it became a subject of study at college level in 1872.

In 1908 pioneers in Home Science expressed

their concern that it should be conceived as making a broad contribution to the educational programme as a physical, biological and social science. Until about 1920 such view made itself manifested to many extent in Home Science programme.

In the early days of its birth, the major concern of this subject was largely for the development of skills for house-keeping and home-making. Later on many times it changed its emphasis before the concepts which are held, were accepted and implemented.

This development in Home Science, as a discipline, was a result of changes in the economic and social pattern of individuals, status of women in the family and community, the rise of science and industries, expansion of human contacts, greater recognition of freedom, rites and individuals development of the human beings.

In India, the programme of Home Science was conceived of as a programme for women and girls but today it is also able to contribute to the education of men and boys too.

This education is provided through the formal school organization at all levels - pre-primary, primary, secondary and higher. Out of school, it is made available to the adults and illiterate people through extension services and adult education programme.

Today, Home Science as a subject, at all levels, is fast losing its connotation of being a subject of cooking, sewing but now efforts are made continuously by the expert Home Scientists and educationists to make it a family oriented programme with its chief purpose to help human beings to be happy and also understanding members of the family. Still, it needs to change its emphasis as suggested below:

1. In the primary school, the emphasis should be focussed upon the child and his life in the family. At junior high school level the emphasis should be laid upon the role of the adolescents in one's family, their responsibilities and their services to others. At the senior high school level the emphasis should be laid down upon developing abilities necessary for a well managed and satisfactory home life.

Anyway the increase in number of schools offering Home Science as one of the subjects for study and also the number of students enrolled in Home Science classes has risen.

It is recognized that the programme should differ from State to State considering the local requirements first but still more emphasis is laid on the follow up of the prescribed syllabus drawn and approved by the

Board of Secondary Education.

In Home Science course, more attention is still placed on such phases as housing, child development, nutrition, time and money management, consumer education, family and social relationship, personal development etc. and less attention is placed on food preparation and clothing construction. The same tendency to shift emphasis is evident in offering this course for secondary school boys with a goal to help them to solve their personal and family life problems. Here too the shift is necessary from courses in food preparation to nutrition, personal hygiene, money management, clothing selection, care of clothes, child development and social and family relationship. Even Home Science schools with agricultural bias are required in rural areas.

As a core or integrated course, Home Science has contributed units in nutrition, child development, human growth and development, use of leisure time, vocational guidance, social and economic factors affecting home and family life, consumer education and human relationship. Community wide programme for family life education is becoming more common with greater attention focussed on co-ordinating the efforts of various agencies in order to strengthen the programme.

An increasingly important role of the

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responsibility of Home Science education at the secondary level is to prepare young girls for the dual role of home-making and job securing.

In Home Science education still much of the research is needed related to problems of planning a suitable programme at secondary level. It is essential to change the pattern of the programme from time to time because the conditions and changes affect the lives of the individuals in their homes and families. Some of the more significant changes required are due to:

1. There is an evident need for family education at all levels.
2. The students of schools are going to be leading members in building their homes and in guiding their own activities, behaviour, thoughts and so on.
3. Change in economic and social conditions and change in moral and spiritual concepts are reflected in broken homes, family instability and juvenile delinquency.
4. With the increase in goods and services available to the family members, the number of opportunities for choices has increased enormously.

5. The roles of family members are changing and it requires reassessment of behaviour pattern for each family member.
6. The homes today does not give the emphasis to production only as it did once in gone days. This change has released time of individuals and members of the family but it has failed to reduce the problems of the family members.
7. Each individual wants freedom and use of one's own rites and they want such homes where democratic values are cherished and in which adults do not impose upon children the values and standards they hold.

The programme is not cooperatively planned by the administrators, parents, teachers and students to meet the needs within the particular institution, And it is also not well planned to meet the needs of all the students at all levels to achieve the set aims.

Family life education needs to be developed as a blending with the existing curriculum content rather than a formal education in specialized subject. For that the Home Science teachers should direct their major efforts to develop and guide a programme of home and family life

which will become a part of a well unified programme. Their next role will be to promote good work experience and working relationship with each other. Their major function as a Home Science teacher will be to be an assistant in the learning situation within and outside the classroom rather than acting as a feeding spoon.

A great variety of teaching methods and teaching aids are available still many of the best methods and essential teaching aids are not adopted for use by the Home Science teachers yet due to lack of training, lack of enthusiasm on the part of the teacher, short of time for preparation, hindrance from the administrators, financial boundry and many others.

The laboratory work including demonstration is not carried out very frequently due to lack of suitable material, equipments, necessary facilities, adequate space and water supply. Again financial aspect here also as a hindering factor.

The supervised study and library work is not possible due to non-availability of the literature in local language and as per the level of the learners.

The general expectation from a teacher is to select the methods and materials which make it possible to consider the needs and interests of the individuals. It should also place an emphasis on an informal learning

situation, within recorded time yet to have maximum and permanent learning. But this principle has practically failed because for the selection of method and material many factors are felt responsible for hindering the teaching learning process. They are length of time per period and number of periods per week, preparation on the part of the Home Science teachers for the selection of the same amount of emphasis laid on the completion of course content than on an amount of learning taking place, materials and facilities available in the institute, enthusiasm of a teacher to provide variety of learning experiences to the students, lack of enthusiasm on the part of the administrators to encourage the use of different methods materials, aids and equipments and provision of essential materials along with required equipments, facilities, freedom, etc.

For this, it will be essential for a Home Science teacher to be helped in forming a consistent and functional philosophy of Home Science education that will guide them in their choice of educational objectives and teaching methods. One must also have good mastery over the subject matter and on education too. One should also see the value of methods from cooperative group learning and deriving satisfaction in their use.

Not a single school tried to discover what students know prior to instruction, application of

gained knowledge in related field to solve problems and motivating them for further learning. Such sort of evaluation and follow up was never done because the teachers lack in basic guidance to develop necessary tools to carry research and to have an evidence of accomplishment.

For evaluating and measuring students behaviour outcomes the use of paper and pencil test as the only mean of determining the effectiveness of the Home Science education disregards many of the most important values in the subject. So interest in objective type evaluation devices which was evident as early as 1953 has waned and the emphasis needs to be shifted to the greater use of variety of instruments for securing evidences of the changes that take place in attitudes and behaviour thoughts among the learners as a result of the Home Science education.

The problems pertaining to administration of the Home Science wing at the secondary level included organization of classes, cost of instruction, arrangement of space and facilities, work load etc., In all the Home Science wings regardless of size good facilities were very rarely provided for the teaching of selection and purchase of goods and services for home, selection, preparation, serving, conservation and storage of food for the family, selection, care, renovation and construction of clothing, selection and care of the house and its furniture arrangement, home

furnishing, selection, conservation and use of food, home equipments, maintenance of health, safety in the home, home care of a sick and first aid, consumers' responsibility and their relationship with the merchants and the business men, maintaining satisfactory personal and family relationship, etc.

In planning laboratories for the Home Science education in most of the schools the following criterias were not found applied:

1. The equipments should be within the price range so that the students will be able to afford the same for their homes.
2. The equipment should offer an opportunity to learn the best features of a variety of materials.

Where expansion of facility and space was not possible, the schools managed with the duplication and multi-purpose use of equipments and other things which of course increases the work for the teachers.

As far as the factors affecting or influencing satisfaction of the Home Science teachers were concerned, they were found to be community conditions, living conditions, marriage and family problems, salary, professional satisfaction, school conditions, teaching load, etc.

Family life education is of major importance to girl students and their family alike. That is possible for a student to be subjected to considerable duplications of content but it will not be possible for a student to gain something with only the barest introduction of the field means without any formal orientation programme.

Home Science is considered as one of the important branches of science. It is becoming a composite field of study consisting of subject matter drawn from the natural and the social sciences and the arts. Through a process of organization, integration and final application it is evolving a special field of study with its emphasis on personal, family and community living.

Womens' education without a knowledge of Home Science is deemed and incomplete. Improvement of home and the community will be laid on the teaching of Home Science to girls at primary, secondary and college level.

In present time in India, Home Science has assumed tremendous importance. Proper adjustments in the course outline is required to be made in our school society to raise the standard of living at all social levels because it will not suffice if only agriculture and industries are developed, it is much more important to improve the quality of human life. This can be done effectively only if people are properly educated in health and hygiene, in nutrition,

in first aid and home nursing, family relationship, etc. This is the only course which has satisfactorily covered these important aspects of human life and it being a most practical and subject related to life, more topics in above mentioned disciplines need to be included.

It is offered either as a general or special subject under optional group. The Union Ministry of Education has taken a step in the right direction in including Home Science in the syllabus of the multipurpose high schools and higher secondary schools.

Now in modern yera there is a great demand for getting admission in schools offering Home Science as a general or special subject. Few studies of the background and follow up of girls who enter these schools have proved the great needs for Home Science education.

The schools offer Home Science for one reason and the girls take Home Science on some other criteria and due to this difference in aims and objectives, the adoption of the improved home-making practices is lacking. The educators expect that the course will prepare girls for their future as home makers and mothers, citizens and so on, also they think that it will meet their immediate needs and the needs of their family and will enable them to set up the right standards but girls expect that the subject being most easy, even dullest learner will pass.

Our women down the ages had been ideal housewives and mothers so it is its fitness of things that it needs to become popular among girls at school.

This need has been met by having a bifurcated course centering around child [learner]. The philosophy underlying Home Science education is same as that underlying what is known as Basic Education - the idea being that education must have a direct bearing on life and should not be purely academic and divorced from the realities of life. The Home Science education centres and the homes have proved that the knowledge of both the sciences and the arts is applied to the making of home. The duty of a Home Science teacher is to create a healthy environment that will be conducive to right living and make for better citizenship.

Home Science education has grown fairly rapidly in our country during the last ten to twenty years. Education is now considered as prime requisite for the economic development of the country but the kind and quality of education have to be improved to meet the demands made on it. This is a great challenge applicable to Home Science education also.

As far as economical aspect is concerned, reasonable sum of money is not spent on Home Science education by the school authorities but it is their

duty to make sure that the quality of Home Science education is improved to justify the needs of the society. It is clear that unless the quality of education in general and that of Home Science education in particular is improved in schools the standards of Home Science education at the secondary level cannot be satisfactory.

The syllabus of Home Science needs to be a comprehension of many related disciplines rather than restricting it to needle work, cookery and flower arrangements.

It has proved itself as the best elective for girls. It is still a common piece of criticism that it is too academic, away from life and far removed from realities which should not be the said or heard future of Home Science programme. The course is not or the teaching of Home Science [their in a position to fulfil the needs of the learners and to solve/ at schools is not/day to day problems because the course is not planned and modified co-operatively by the teachers and learners, facilities are insufficient and not upto the mark, well qualified and experienced teachers are not available always, budget is very restricted for the subject, the syllabus is not upto the mark so it should be reoriented to enable girls to discharge better the various duties that inevitably develop on the mistress of the home. It also reminds us to make it even more broad based programme.

There are many misconceptions abouts Home Science education that it merely amounts to knowledge required for

house work which can be acquired through household activities. Actually this science goes much deeper than mere mechanical knowledge. Our women are usually experts in cooking but don't you think that a delicious food or meal should be nutritious too?, all within the means of the bread earners?, hygienically prepared and attractively served?

Therefore, we should have more trained, experienced and well qualified Home Science teachers along with all the necessary financial and materialistic necessities to handle the programme.

Its scope is admittedly widening much and cannot be confined only to household and needle work. For the harmonious and all round development of the pupils personality, sufficient emphasis is yet not laid on laboratory and library work, organizing symposium, panel discussion, group discussion, organizing tours and excursions, group and individual projects to help a lot without reorganizing the syllabus and with limited physical facilities also.

Conclusions

Thus, it is concluded from the study that Home Science is a branch of human knowledge which not only encourages but also flourishes on rebellion brought about by its rebel practitioners. Its monstrous growth can be appreciated by the fact that today there are more than one thousand multipurpose schools with Home Science wing in India.

There are bad prospects and foggy perspectives for the present day Home Science teaching in India. On surveying literature it appears that Home Science tends to defy its own definition in concrete terms. The situation is, the administrators, the Home Science teachers and the Home Science students are not fully aware of its functional philosophy. The educationists stress the importance of scientific knowledge in our day to day affairs and recognize it as a major activity in terms of work experience but it has failed to achieve the goals due to academic, financial and materialistic hindrances.

As Home Science itself is a developing field in our country its definition is also in the process of development. Ours is not a poor country so far as availability of sources and resources for teaching of Home Science is concerned still best efforts are not made to utilize the same due to time limits and many other responsible factors.

Parents question the utility of the prevailing soft Home Science education. Sharp criticism and debate on the deficiencies in Home Science programme has begun to mount higher and higher because the teaching is based on the prescribed textbooks. Nationalization has killed the very ferment of variety of programmes in the curriculum. Students and teachers follow them slavishly. The methods employed for Home Science teaching are dull. Both teachers and students worship the goddess of examination. The testing

ability of the tests and examination is low. These are the main reasons that the Home Science teaching is not related to the environment at all. So training and adoption in scientific methods, problem solving, creative thinking and the development of scientific skills, interests, attitudes and appreciation remain in an utter state of neglect.

Internal assessment, which could remedy the defects, and for this very reason is desirable, is not only found insufficient but also impracticable objectively on a large scale due to lack of funds, facilities and enthusiasm on part of the Home Science teachers.

There is hardly any supervision and availability of experts advice in Home Science teaching by those who are really competent to guide them in effective planning, execution, evaluation and reformation of the programme.

An impressive achievement to our credit is that an increasing number of learners is overcrowding the Home Science wing and will continue to do so.

The best work can take place under worst conditions provided the administrators substitute plans for expenditure before incurring expenditure.

So even within its existing resources, however limited they may be, every institute can do a great deal more, through better planning and harder work to improve the quality of education it provides.

Suggestions

The Home Science education at secondary level needs to be strengthened at its weakest points to allow the quality and quantity of learning to go up. The programme of Home Science needs strength and improvement in following respects:

1. Upgrading the rural high schools with Home Science stream.
2. Home Science teaching process.
3. Examination reform.
4. Teacher supply.
5. Guidance and counselling - for both (students as well as Home Science teachers).
6. Inservice training to the Home Science teachers.
7. Role to be played by the educational organizations and professional organizations.
8. Financial resources.
9. Syllabus and curriculum.
10. Evaluation and follow up programme.
11. Research work.
12. Activities related to Home Science.

13. Physical facilities.
14. Administration and administrators.
15. Admission policy.
16. Learning experiences.
17. Aims and objectives.
18. Records.
19. The Home Science staff.

Suggestions for Strengthening the
Programme of Home Science Education
in the Different Respects

It would be observed from the study that practically the whole field of Home Science education, improvement of teachers' professional competency, problems of Home Science school, requirements and preparation of teachers, strengthening the Home Science teaching and evaluation reform had been examined in the larger setting up that is required to be done in near future, in keeping with the progress and targets in other correlated fields of education.

Secondary education being the most crucial stage in the entire range of education is supported by primary education on the one hand and feeding university education on the other but in actual practice it has been a much

neglected sector. Home Science education is provided to those who may or may not seek it and make no deliberate effort to increase its efficiency. At the same time the insistence on quality which is emphasized in university education is not specially stressed at the secondary level. Thus, the coverage of number of one hand and the demand of quality on the other, Home Science education has been more or less left to take care of itself.

As a suggestive measure for the expansion of the Home Science education at secondary level in quality and quantity is given in this chapter.

1. Upgrading the Rural High Schools with Home Science Stream

1. All the rural high schools or higher secondary schools should be facilitated with the programme of Home Science education for the girls of the farmers because they need it the most for the adoption of improved practices in home-making and house-keeping.

2. The unrecognized schools should be recognized for which donators may be encouraged and funds can be raised for the upto the mark availability of the physical facilities and maintaining the Home Science wing.

3. Permission to start a Home Science wing in any school should not be granted unless and until the school fulfils the basic requirements for the effective programme

of Home Science education.

4. Expansion of multipurpose schools in towns and cities should be to the minimum extent and now the efforts on consolidation and strengthening should be made for the existing Home Science offering schools.

5. In each district of each State of India, the Ministry of Education should develop or establish at least one model Home Science offering school which can act as a model example for other Home Science offering schools.

2. Home Science Teaching

1. There is a need for fostering and encouraging development of skills in home-making and house-keeping among the girls by applying different teaching methods and aids.

2. The science club should include the activities related to Home Science field also.

3. Home Science teachers must be encouraged to use varieties of methods suited to the topic and adoption of the information.

4. Recognition and encouragement should be given to Home Science teachers who maintain quality of teaching.

5. Teaching should be made pupil centred rather than subject or examination centred.

6. In teaching-learning process, students and teachers should act as partners in an educational enterprise.

7. Home Science teachers should gradually learn the best use of teaching methods and teaching aids and also they should develop skill in preparation of simple visual aids.

8. Administrators must provide the conditions essential for successful teaching of Home Science as far as finance, physical facilities and teaching aids are concerned.

9. During practical classes the student-teacher relationship must be largely on an individual base.

3. Examination Reform

1. Variety of tests to measure the achievement of skills, abilities, aptitudes and interest be introduced.

2. Application of knowledge should be given top priority in evaluation rather than testing the memory and cramming capacity.

4. Teacher Supply

1. The minimum qualification for the high school service for a Home Science teacher should be B.Sc.(Home); B.Ed. or B.A. (Home Science); B.Ed. For the higher secondary schools the minimum qualification should be M.Sc.(Home), B.Ed.

2. To meet the shortage of the Home Science teachers who are well qualified and experienced, the teachers' training colleges or Home Science colleges should arrange long or short term courses in Home Science education giving or imparting training in subject matter and in education. For this the Home Science offering schools should utilize the sources and resources available at the teachers' training or Home Science colleges.

5. Guidance Work for the Teachers and Learners

1. For better working of multipurpose high schools, it is necessary to see that the learners receive wise and informed guidance for the selection of the diversified courses. For this each school must have a full time counsellor or career master or a suitable teacher must be given short term training in guidance and counselling or the school should work with the central bureau of vocational and educational guidance.

2. Likewise the Home Science teachers must also receive thorough guidance from the senior Home Science teachers and other Home Science experts for the use of suitable teaching methods, material, preparing course outline, paper setting, conducting the theory and practical classes, etc.

6. Inservice Training to the
Home Science Teachers

1. For any sort of training the administrators of the school should willingly release the Home Science teachers from duty on study leave and pay full salary during the period of study and they must be given suitable stipend to enable them to meet their personal expenditure during the training period.

2. Short duration training courses can be organized by the Home Science colleges or teachers' training colleges during vacation time.

3. During the training, the subject in which they have not majored must be brought up to some extent and the main subject studied or to be taught must be intensified to higher standard.

4. A study should be conducted to make a correct assessment as far as the requirements of the Home Science teachers every year and the number of graduates who join the teaching profession.

5. Teachers' training courses in Home Science should be instituted in such Home Science colleges who offer Home Science education and extension as one of the disciplines in all the courses.

6. Teachers' training colleges or Home Science

colleges should organize inservice training programmes for non-Home Science graduates and refresher courses for both the categories of the Home Science teachers.

7. Professional Organizations

1. The Home Science teachers association should be established in each State which should meet at least once or twice a year and set a relative policy for giving weightage to internal, oral, annual examination performance, weightage to be given to theory and practicals and different disciplines of Home Science, the type of test items to be included and the pattern of evaluating the teaching-learning process etc.

2. The association will be also responsible to organize seminars, workshops, symposium etc. by time to time and thereby to help the Home Science teachers in their jobs. The association will be also responsible to solve the problems of the Home Science teachers and also guiding them properly.

3. The association will also be responsible for tackling the problem of supply of Home Science teachers by maintaining record of the Home Science graduates and keeping constant touch with them.

8. Financial Recourses

1. The Home Science teachers' association should

calculate and estimate the cost of Home Science programme at secondary level and same may be kept for the budget.

2. Efforts must be made to new and effective ways and means of mobilizing the full support from the community and of drawing upon untapped sources in order to give the best possible education at minimum cost to the girls. With sufficient will and strong faith, human ingenuity can overcome difficulties.

3. Voluntary agencies should be encouraged and assisted in starting Home Science wing.

9. Syllabus and the Curriculum of Home Science

1. The present syllabus of Home Science more or less meets the needs of those who intend to pursue higher academic or professional education at the university level and least meets the needs of those for whom secondary education is terminal so if possible one year exemption should be granted to students of Home Science stream who seek admission in Home Science colleges.

2. Along with family education, the modern curriculum should enrich professional and vocational preparation.

3. Sound wholesome family life is basic to attain optimum personal development and happiness so education for home and family living should be a part of general education

for all the girls. If possible it must be introduced and taught to boys also.

4. A competent consultant should be made available to the Home Science teachers for building a sound Home Science curriculum by the school authorities.

5. Time and resources should be sufficient enough to implement the revised programme of Home Science in the school.

6. The content of the course or syllabus should be developed through a deep study of the needs and interest of the students and as per the requirements of the contemporary life.

7. Students' participation in planning and developing the programme is worth to consider to make the programme practically suitable to the learners.

8. The syllabus and curriculum along with the whole programme of Home Science education in the school should be evaluated after every three to five years and recent trends must be included in by time to time.

9. Use of library must be encouraged for both - classroom preparation and leisure time activity - by giving assignment projects, term papers and by developing job oriented syllabus.

10. Evaluation and Follow-up Programme of
the Programme of the Home Science
Education in Secondary Schools

1. Every year the programme must be evaluated to know as to how far the programme is capable of fulfilling the needs of the individuals and the society. The programme must be also evaluated in terms of set objectives to know its effectiveness.

2. The Home Science teachers must be trained in the development of different tools for research and also for the tools to measure different behaviour outcomes through tests and examinations during the inservice training.

3. Follow up of the past students must be carried out to know the practical utility of the Home Science education and on the basis of the same to modify the programme by time to time.

11. Research

1. Some relative action research must be carried on by the respective school authorities in the field of Home Science and it should be made known to other Home Science teachers and Home Science schools of the same State.

2. The Home Science teachers' association should start their own periodical or news letter service in which variety of information can be published.

3. The schools should also be motivated to undertake a district-wise or state-wise problem for experimental research purpose and also one project which they could handle at their own level.

12. Activities Related to the Field of Home Science

1. The Home Science offering schools should celebrate Home Science week. As the days are to be used as on an occasion for promoting and popularising Home Science education, the celebration should be organized during which exhibitions, competitions, local field trips, picnics, inviting local experts from the relative fields of Home Science and talks delivered by them or parents of the progressive girls can participate in such programme.

13. Physical Facilities

1. The space, furniture, equipments etc. provided for Home Science wing should be related to the programme offered and the section should set a very good example for the good selection, use and maintenance, care etc. of the available facilities to the economical level of the family living pattern of the local people.

2. Along with classroom and laboratories and library it is quite essential to have good museum, too. In that museum models of different kitchen arrangements, flower arrangements, types of curtains, models of different

room settings, modern time saving equipments, childrens' games, pictures related to child growth and development from fetus to infancy or even upto the school-going age, different types of contraceptives, charts showing ethics for wifery, motherhood, daughterhood and sisterhood can be kept.

3. Outdated books, equipments, other non-useful material must be replaced by new adoptions.

4. Adequate fund must be released every year for the expansion and maintenance of the Home Science wing.

5. As far as equipping the library and laboratory is concerned, the State Department of Education should directly purchase the necessary equipments and they should distribute by a suitable machinery and the sum can be deducted from the grant.

6. Some of the useful American books related to Home Science disciplines should be got translated into the regional languages and made available to all the Home Science schools for which the experts must be given financial help by the Government.

7. Courses of study for which adequate staff, equipments and space are not available, should not be introduced in any of the school.

14. Administration and Administrators

1. The administrators must be familiar with the functional philosophy and major purposes of the Home Science programme. Also they should analyse the expectations of the community people and remain co-operative with the Home Science teacher. They should seem to provide the material resources necessary to build strong Home Science unit within the set educational goals. They should always supply conditions to do experimental work to the Home Science teachers and also encourage creative work for advancement.

2. Administrators should always show keen interest in the development of the programme. They should make serious efforts to know the general functioning of the Home Science programme in the school, the recent developments in the same field, first hand information about the curriculum and programme planning.

3. The administrators should try to know and understand and also try to solve the lacunas coming in the ways of development of the Home Science teacher as well as the programme as a whole.

4. On this modern yera no administrator should believe in the traditional class education. They should have wide vision in the field of education and understanding the place of Home Science in present school curriculum.

5. If over a period of time, funds are insufficient to carry the whole programme satisfactorily, the programme should be curtailed in line with the budget in order to maintain the acceptable standard.

15. Admission Policy

1. During admitting girls in Home Science classes, they must be made aware of the aims and objectives of the Home Science programme, its importance in their life, necessary requirements throughout the course etc.

2. During parental meeting also the importance and functions of Home Science education must be broadcasted for the information of the parents and community people.

3. The parents must be made aware of the activities undertaken during the year through exhibition, seminar, parental meetings, etc. before admitting the girls.

4. During parental meetings, the parents' expectations pertaining to the field of Home Science, their views about the current programme must be welcomed for the improvement of the curriculum and to make it more needful, helpful and practical.

16. Learning Experiences

1. In all the Home Science Departments, facilities should be provided for the learning of selection and

purchase of goods through students' co-operative store and students' saving bank scheme.

2. The Home Science teachers should do formal follow up of the past Home Science pupils to find out their developed skills, other qualities as far as application of the principles learnt in the subject. The frequent home visits, keen observation discussion with parents and the past students will help her in the way to develop oneself as well as the Home Science programme.

3. De-emphasize text-books and chalk-board methods and encourage self-learning techniques by several means in the learners and make them independent learners.

4. Individual experimentation should be encouraged in schools.

5. Classroom strength should not exceed more than 30 students in any case.

6. Suitable methods should be devised by the Home Science teachers to reduce the workload for giving greater attention to bring improvement in quality of teaching and in raising the efficiency of the programme.

17. Aims and Objectives of the Home Science Programme

1. More emphasis should be laid on the clear cut statement of objectives for various categories of the

students at various age levels.

2. Aims should be framed keeping emphasis on the fundamental knowledge and expected behaviour outcomes rather than on more and more subject matter.

3. There should be more emphasis on meaningful bearing than mechanical learning, more and more emphasis on the improvement of thinking than on the attainment of specific skills and understanding.

18. Records to be Maintained for Guidance

1. As Home Science is a subject for the family education, the daily felt problems will be the curriculum and the course outline so to help the students it is essential to have autobiography or case history of each individual for regular guidance.

2. Periodic progress reports of academic progress of pupils should be sent to the parents and the same sort of progress report of progress in the household activities should be asked from the parents.

19. Home Science Teaching Staff

1. As far as possible the school should try to acquire sufficient number of trained, experienced, well qualified and sufficiently competent staff members with the help of the Home Science colleges or teachers' training

colleges or Home Science Teachers' Association or the employment exchange bureau.

2. Unless and until sufficient physical facilities, adequate staff members etc. are not sufficient enough, the school should limit its offerings.

3. The student teacher ratio may be higher in the first one or two years of the high schools but it should not be the case in upper classes.

4. Teachers must be judged on the effective student learning, their satisfaction and the enjoyment and the satisfaction a teacher obtains from what she does. If these conditions do not exist due to high student ratio, either decrease the working load of a teacher or increase the number of Home Science teachers.

5. Regularly assigned non-teaching responsibilities should be taken into consideration in deciding the number of staff members needed in relation to the teaching load.

6. In selection of a new staff member, attention should be focussed on personal qualities and on professional preparation and experience in relation to the job and programme. Attention should also be given on ability to work with the programme of Home Science education.

7. Where there is scarcity of Home Science teachers,

the preference should be given to adequately successful home makers with family. Later on they may be deputed for further training and further study in a short duration course so that they are informed of new needs and changes in the field of Home Science.

8. To avoid the scarcity of textbooks, the Home Science teachers must be encouraged for advanced studies, further training, library reading, action research work, field work, writing and preparing material for publication, participating in the activities of the professional organizations which will ultimately result into exchange of information, personal stimulation, advancement of profession and improvement in teaching.

9. The Home Science teaching staff should show interest to participate in professional meetings, seminars, workshops, symposiums, panel discussion etc. and they should become a members of the professional organization.

10. The grade of secondary school teachers must be equal to lecturers working in colleges because in colleges the lecturers are assigned by assistant lecturers and tutors and demonstrators and laboratory assistants while poor Home Science teachers have to handle entire programme through oneself only. Also due to higher pay scales and other benefits, eminent Home Science teachers are tempted to work in colleges and only III class or II class

graduates work in schools. They also leave the job soon if they get higher chance so to avoid this problem if the pay scales are same as the colleges, there will be less possibility of migration of the Home Science teachers. Also as far as the work load is concerned, physically and mentally the Home Science teachers work more than the lecturers of any college.

11. The highly qualified Home Science teachers must be paid as much as they may get in colleges.

12. In short of teachers, community resources and guest speakers can be invited and used for the instructional purpose by time to time.

13. Precised figures of teachers required in Home Science should be worked out by the department of education after each year and send it to employment bureau, Home Science colleges, teachers' training colleges, professional organizations, etc.

14. Existing facilities for higher studies in Home Science should be increased so that non-Home Science teachers or graduates can be trained by short duration courses. Such Home Science teachers may be paid with an attractive pay scales on the conditions that they should serve as Home Science teachers for specific period of time.

15. The school hours for work should be so adjusted as to enable even married women to work as Home Science teachers.

16. Suitable residential facilities should be provided for women teachers who live alone and willingly join the service though being outsiders.

17. Sufficient number of Home Science colleges should be opened in those states where there is shortage of Home Science teachers.

18. It is essential to set up Home Science Teachers' Association in every state who can cater the needs of the Home Science schools and can help in getting job to the fresh graduates.

19. The time spent by a teacher on the preparation of the laboratory work should be counted as a part of the work load to sponsor practical experience.

20. General Suggestions

1. A separate and suitable staffed Home Science unit must be established and without full establishment of the wing, permission for instruction should not be given to the school by the district education inspector. In this regard the school inspectors must be fully objective.

2. The All India Home Science Teachers'

Association should undertake the preparation of teachers' guides and manuals as far as using different methods of teaching, different methods of evaluation, planning course outline etc. are concerned.

3. The secondary school leaving certificate examination board or the state board of secondary education or the directorate of public instruction should initiate a study on the working of the Home Science syllabus in various parts of the state and make useful radical changes in it.

4. The school inspectors should act as a peripatetic field counsellor for every multipurpose schools.

5. For professional development, the administrators should arrange seminar, group discussion, symposium or panel discussion when the Home Science teachers can meet and discuss their problems freely.

Recommendations

The present study can further be explored through following studies:

1. A critical study of the factors affecting the adoption of improved practices in home-making and house-keeping by the girls of the Home Science wing of selected secondary schools.

2. A study of the training needs of the secondary

school teachers teaching Home Science for better implementation of their training.

3. A study of the impact of Home Science education on the work efficiency of the Home Science students of selected Home Science offering secondary schools.

4. A critical study of the Home Science students of selected secondary school as who and what motivated them to join Home Science stream.

5. A study of the participating experiences provided to the Home Science students during their four years of schooling.