CHAPTER IV

FUNCTIONS OF HIGHER SECONDARY TEACHERS

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4.1 The need for identifying functions of teachers

Teachers are among the oldest of society's occupational groups. The status of teaching as a profession, however, has developed in comparatively recent times. The society ascribes main function of teachers as teaching, but very little has been done to describe the specific activities to be included under teaching. Dove rightly describes teaching as follows: At present, the practice of teaching is based as much on rule of thumb, working experience, common sense and guess work as on research-based theoretical knowledge. This lack of clarity may be due to:

- 1. The lack of agreement about the definitions of teaching.
- 2. The inadequate evidences available to demonstrate conclusively the 'effectiveness of teaching'.
- 3. The professional bodies have developed in recent times and they have not tried to systematically describe the various activities to be undertaken in the teaching.

This inadequate understanding of the process of teaching and relatively slow development of professional standards have contributed in a large measure to the inertia in identifying the specific functions of teachers. However, the University Grants Commission and other professional bodies, in recent years, have accepted broadly the functions of teachers as Teaching, Research and Extension. At the school level, teaching and extension functions of teachers are more emphasized. It may be observed here that no attempt has been made to describe specifically the various functions of teachers at different levels.

In the new pattern of education (10+2+3), although the +2 stage has been given distinctive place, it may be noted that the functions of teachers at this stage have not been clearly spelt out. The higher secondary stage is sandwitched by 10 years of general education and later university education. As this stage has to cater to pupils who would like to continue their university education as well as those who would like to go to world of work, the teachers working at this stage have to play a multiple role. The investigator recognising this vital need has attempted to study the functions of higher secondary teachers.

4.2 Purpose

In order to realize the objective 3, (please refer objective in Chapter I p. 3)), the investigator studied the functions of higher secondary teachers with a view to identify the specific components for training the higher secondary teachers.

4.3 Data required

In order to study the functions of higher secondary teachers the following details were required:

- 1. The expected functions of higher secondary teachers as visualised by the Higher Secondary Education Board, higher secondary teachers, principals, experts, various commissions, committee reports, Secondary Education Act, policy documents etc.
- 2. The actual functions as visualised by the higher secondary teachers.

4.4 Expected functions

The very essential function of teachers is to teach effectively. The higher secondary teacher has to prepare well for teaching his subject. For this purpose, the higher secondary teacher need a deep understanding of the structure of the subject matter in which he specialises and of the implications for practical teaching of research into learning and human development. The higher secondary teacher has to perform multiple role to fulfil the objectives of the higher secondary education.

In the last few years, there have been quite extensive and profound changes in the teacher's tasks and roles. These changes in the roles and tasks of teachers have been derived from broader changes in the educational system. Teaching is no longer confined to children in classrooms, it may also concern out-of-school children, youth and adults. With an increasing recognition of the learning needs of diverse groups of learners, the developments in curriculum and instructional arrangements have been moving towards greater flexibility and individualization. These developments require new orientations and new learning on the part of higher secondary teachers. Linked to this are the changing roles of other educational personnel who work closely with teachers, supervisors, teacher educators, principals, educational advisers.

By way of illustrating these changing roles and tasks, the following is a listing based on perceptions of a group of educators of some of the competencies which teachers need today. They should be able to:

Participate professionally in the development of education programmes;

- Demonstrate competency in one or more subject areas;
- Formulate objectives for learning based on learners' needs in relation to life;
- Develop, choose or renovate learning materials suited to specific objectives;
- Identify, organize and make available appropriate learning resources;
- Guide and facilitate learning;
- Monitor and evaluate learning progress;
- Diagnose a learner's weaknesses and strengths;
- Install an appropriate feedback-correction system to enhance learning;
- Handle individual, as well as group-learning activities;
- Motivate pupils for self development and selfevaluation;
- Interact with parents and community members;
- Participate in adult literacy programmes.

The higher secondary teacher has to do centrally educative tasks like teaching, helping students to learn, keeping pupils' records etc., and other tasks like taking the physical care and welfare of learners, the care of the equipment and materials and community liaison and mobilisation.

Thus he has to perform various roles effectively to fulfil the objectives of higher secondary education.

4.5 Job analysis scale for higher secondary teachers

The Job Analysis Scale was specially prepared for higher secondary teachers to collect data regarding their functions in the school.

4.5.1 Procedure adopted for developing the Job Analysis Scale.

The investigator studied the reports published by Higher Secondary Education Board, Secondary Education Act, reports of the education commissions, and other educational records with reference to the specific functions of higher secondary teachers. Further, the investigator interviewed a few higher secondary teachers to formulate ideas regarding the functions of higher secondary teachers. Then, the activities carried out by higher secondary teachers were listed. The care was taken to see that all the aspects of school activities are included in the list. This inventory of activities were given to a few experts and higher secondary teachers to judge the appropriateness of items. Out of 175 items prepared, after screening the total number of statements to be included in the questionnaire was decided as 74. Then the Job Analysis Scale was prepared and given to five higher secondary teachers to give their opinion about the Job Analysis Scale. The items in the Job Analysis Scale was modified in accordance with their comments and suggestions. The final form of the Cob Analysis Scale consisted of 74 statements about the functions of higher secondary teachers. Some items of the questionnaire were made open ended to receive further comments, suggestions regarding the functions of higher secondary teachers.

4.5.2 Structure of the Job Analysis Scale

The Job Analysis Scale was specially prepared for higher secondary teachers to collect data regarding their functions in the school.

The Job Analysis Scale consists of two parts. Part I concerning general information and Part II consists of seventy four statements about functions of higher secondary teachers and one open ended question is provided for the further comments/observations or suggestions by higher secondary teachers. The Part I i.e. General Information includes name of the teacher, the address of the school, age, sex, experience in teaching as well as research in years, qualifications including details regarding specialisation at graduation level and post-graduation level and the methods of teaching school subjects specialised at B.Ed. level. information regarding the classes and subjects taught by the teachers was collected. The information about the number of periods taken by each higher secondary teacher was also collected. The purpose of collecting general information was to understand the background of teachers responding to the questionnaire and to interpret the responses of the teachers in the light of their background like experience, qualification etc.

In the beginning page the purpose of the questionnaire was explained and the components of questionnaire was delineated. The instructions regarding answering the questionnaire was clearly indicated.

In the Part II of the questionnaire items of teacher's job were presented. Clear instructions are provided about the procedure of answering the items and an illustration was also provided.

The Job Analysis Scale consists of the statements related to the job of a higher secondary teacher in the school. Against each statement three categories are provided viz., Very Essential, Essential and Not Essential. The teacher has to read each statement carefully and judge the function as Essential, Very Essential or Not Essential. The statements are classified into 8 sections. Another item at the end of the questionnaire has been provided which is open ended. Here, the higher secondary teachers are given scope to include more items regarding functions of higher secondary teachers which are not included in the questionnaire. The rumber of items and their distribution in different sections are shown in table 4.1

Table 4.1 showing the items of teachers job and their distribution in different sections

Title of the Section		Item Numbers	
1.	General	1, 2(i),(ii), (iii), 3, 4	
2.	Administrative, The Relationship with Colleagues and students	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.	
3.	Teaching	16,17,18,19,20,21,22,23,24,25,26,228,29,30,31,32,33,34,35,36,37,38,340,41,42,43,44(i),(ii),(iii),(iv),45(i),(iii),(iii),(iv),46,47,48,49.	
4.	Laboratory work	50,51(i),(ii),(iii),(iv),52,53,54,55,56,57,58,59,	
5.	Evaluation	60,61,62,63,64.	
6.	Guidance and Counselling	65,66,67.	
7.	Co-curricular Activities	68(i),(ii),(iii),(iv),(v), 69(i),(ii),(iii).	
8.	In-service Training	70(i),(ii),(iii),71,72,73,74.	
	-	75. Any other comments, suggestions regarding the functions of higher secondary teachers.	

(For further details regarding the structure of the questionnaire please refer Appendix IV A).

4.6 Sample

All the higher secondary schools in the Baroda District formed the population for this study. There are 98 higher secondary schools in Baroda district. The investigator using stratified random sampling technique, selected 25 higher secondary schools in the urban area and 8 higher secondary schools in the rural area of Baroda district. (The name of the schools selected, the number of teachers responding the questionnaires are presented in Appendix IV B).

In each of the selected school six questionnaires were mailed to the principal. The principal of the school collected the information through questionnaires and sent it back to the investigator. Totally 204 questionnaires were sent. Out of these,141 higher secondary teachers responded.

The sample consisted of 94 male teachers and 47 female teachers. The age of the teachers in the sample range from 23 years to 56 years. With this data one could observe that teachers of young age, middle age and old teachers are present in the sample.

The sample consists of teachers having teaching experience from one year to 30 years and some teachers have research experience from one to three years. It can be clearly observed that majority of the teachers in the study do not have any research experience. There are 59 teachers with M.A., 34 are M.Sc. and 24 teachers are M.Com. There are 23 teachers having only the graduation degree (i.e.B.A./B.Sc./B.Com.) but they have teaching experience ranging from four years to thirty years.

4.7 Data Collection

The Job Analysis Scale (Questionnaire) was mailed to the rural schools in the sample (i.e. 8 schools). To each of these schools a set of six questionnaires was mailed to the principal. The principal of the respective school got the questionnaires filled by higher secondary teachers and mailed the same to the investigator.

The investigator personally visited all the schools in the city included in the sample (i.e.25 schools) and administered the questionnaire. The investigator could interview a few higher secondary teachers and collect their opinions.

4.8 Data Analysis

The data obtained was analysed in the following manner:

In the Job Analysis Scale there are two types of items. The first 74 items are of restricted response type and the last item is open ended i.e. the respondent is free to give any length of answer. In the restricted answer type, for each item there are three responses possible viz., Not Essential, Essential and Very Essential. The weightage given for each type of response was as follows:

Not Essential 1
Essential 2

Very Essential 3

The raw score was obtained for each category by summing up of all the scores. The combined raw score was obtained for each item by adding all the raw scores of all the categories. The percentage score was separately

computed in all the categories for each item. The percentage score of 'Essential Category' and 'Very Essential' category was combined to determine the essentiality of the each function. Further, analysis is done sectionwise (For details please refer Table 4.1).

4.8.1 There are four items in the Section: General

Most of the teachers in the study have found all the items in 'general' section as very essential. However, some teachers think that admission work is not the job of the teacher and some teachers think that training students for special examination like scholarship examination item 2(iv) should not be considered as the work of all teachers.

4.8.2 Administrative, The relation with colleagues and students.

This section consists of eleven items from item 5 to In this section also majority of the teachers in the study have recommended all the functions as very essential. However, for item 7, some teachers are of the view that preparing time-table is the work of semior teachers and supervisors and therefore all the teachers may not be involved in the preparation of time-table. As the majority of the higher secondary teachers have recommended the preparation of time-table as one of the important functions and as the junior teachers also after a few years have to occupy the senior position, it is necessary that the higher secondary teacher learn the preparing of timetable. Some teachers are reluctant to recommend taking extra classes when the need arises as the regular function of teacher. (13% of teachers have shown this function as not essential). Almost all the teachers (99%) have rightly recommended that maintaining good relation with

colleagues (item 5) and maintaining good relation with students as very essential (item 14). Further, they have suggested that respecting the orders and directions of the head of the department/principal as one of the very essential function of the teacher (99%).

The higher secondary teachers have also recommended that the following administrative functions are very essential functions of teachers:

- 8. maintaining school records of pupils progress and other relevant information (93%)
- 11. Maintaining attendance registers (96%)

4.8.3 Teaching

In this section there are thirty four items (i.e. item 16 to 49). For the sake of better presentation this section has been divided into five subsections, i.e., 4.8.3.1 to 4.8.3.5, each subsection with a separate and appropriate caption.

4.8.3.1 Curriculum (includes item 17 to 23)

Majority of the teachers have recommended all the items (i.e., from 17 to 22) as very essential. However, some teachers are of the opinion that the teachers need not know the recent developments in the subject. (6% of teachers have opined this function as not essential). As majority of the teachers think that the attempts to know the recent developments in the subject is very essential, this function may be considered as one of the important functions of teacher. Some teachers think that all the teachers need not devise lesson plans, syllabuses in the subject (6%). In the regular teaching all the teachers may not be able to write lesson plans for all lessons and

all teachers may not be competent to draft syllabus in their subject. However, it could be observed that drafting syllabus in the subject and developing lesson plans is one of the important functions of teachers (94% of the teachers have recommended this function as essential).

Some teachers (8%) are of the opinion that the higher secondary teacher need not try to gather information regarding progress of pupils' work in other areas of the school curriculum (item 22). This opinion is harboured by few teachers for they may be thinking that if the progress of pupils in other areas have to be collected, the other teachers should co-operate and further, this will be an additional work for the regular teacher. It may be observed here that majority of the teachers in the study have found this function as essential for the higher secondary teacher. This function provides an opportunity to the regular teacher to continue to monitor the progress of pupils' work in all the areas of the school curriculum.

4.8.3.2 Classroom management (this sub section includes item 16, 48 and 49).

All the teachers in the study have recommended that maintaining discipline in the classroom is one of the most essential function of teacher.

Majority of teachers are of the opinion that teacher should criticise the undesirable behaviour of students (89%). However, some teachers (i.e. 11%) are of the opinion that criticising the undesirable behaviour of students may not improve the behaviour of students. They may be thinking of other effective strategies to correct the students

behaviour. Majority of the teachers have recommended that the teacher can punish the students with adequate reason (item 49). However, some teachers (13%) are of the opinion that considering the developmental stage of students i.e. adolescence, it may not be appropriate to punish them. It could be observed that considering the developmental stage of students, the teachers have to use punishment sparingly with adequate reason and the teacher as far as possible has to avoid punishing students. The higher secondary teacher can think of other workable strategies to effectively control the classroom.

4.8.3.3 Method of teaching and organising learning activities.

This sub-section includes item 24 to 47. Majority of the higher secondary teachers (95%) have emphasized the development of the skill of speaking clearly and fluently to individuals, small groups, large groups (item 24). The teachers have recognised the importance of the structure of the subject and they have recommended that the higher secondary teachers should follow the methods appropriate to the teaching of the subject (i.e. Physics, Chemistry, History etc.) (95%).

Majority of the higher secondary teachers (92%) have recommended that the importance should be given to the project work with individuals and small groups. Considering that the students are in adolescent stage, they should be given some opportunity to do independent work. The project work helps the students in developing self confidence and attitude of working independently. However, some teachers (8%) are of the opinion that the project work will be difficult to carry out at this stage (i.e. +2 stage). But, considering that majority of the

teachers are in favour of organising project work, it could be observed that higher secondary teachers should be trained in designing and organising the project work at +2 stage.

Almost all the teachers in the study (99%) have recognised the importance of the understanding of level of students and it is a fundamental activity in which the higher secondary teacher has to develop adequate skill and understanding.

The following are the important activities which have been recommended by almost all teachers as very essential. They are

Item	Number	Function	Percentage of teacher
	29	Selects and presents the	98%
		illustrations and examples appropriately	
	30	Asks relevant questions to pupils	9 9%
	31	Encourages students to do well in their learning activities	98%
	32	Tries to point out the common sources of pupils' errors and	
		misconceptions in the subject	98%

4.8.3.4 Facilitative Teaching This sub-section includes item 33 to 43 and 46 and 47.

All the items in this sub-section have been recommended by majority of teachers (more than 90%) as essential for effective teaching. However, for item 35, i.e., allowing students to hypothesize, some teachers (14%)

find this activity as not essential. This may be due to their orientation to a particular strategy of teaching. They are not ready to give freedom to students to hypothesize. Considering that the students at higher secondary stage will be in formal operational stage according to piaget's theory of cognitive development, it is very essential that they be allowed to hypothesize. Majority of the teachers (86%) have found this function of teacher as very important.

4.8.3.5 Audio-visual aids In this sub-section item 44(i),(ii),(iii),(iv) and 45(i),(ii),(iii),(iv) are included.

In the item 44 some teachers have considered the use of certain aids like over head projector, slide projector, C.C.T.V. as not essential (16%) and the aids like slides, microscope, models etc. also are considered not essential by some teachers (10%). However, majority of the teachers (more than 80%) have recognised the importance of the use of these aids and have strongly recommended to use these aids in higher secondary teaching.

With regard to the use of books, pamphlets, journals, and magazines, specimens, models etc., more than 95% of the teachers have recommended that it is very essential to use these in classroom teaching

4.8.4 Laboratory work

The laboratory work is compulsory for science teachers. This section includes items 50 to 59. In this section also majority of the teachers (i.e. more than 90%) have recommended all the items as very essential for science teaching. However, some teachers (8%) find that

project work is not essential for students at +2 stage (item 51 iv). This may be due to the non-availability of laboratory facilities in some higher secondary schools. It may be observed that majority of the teachers (92%) have recommended project work as very essential for higher secondary teachers. Majority of the teachers (96%) have also recommended that the teachers should devise teaching aids, experiments and demonstrations (item 55).

Some teachers (8%) find item 58 as not essential. This may be due to the fact, that in some laboratories a separate laboratory co-ordinator is present and usually he carries out this activity of maintaining records and maintaining of laboratory. However, majority of the teachers (92%) have recommended that it is one of the essential functions of teachers.

4.8.5 Evaluation

This section includes **1**tem 60 to 64. Most of the teachers (more than 95%) have recommended all the activities of evaluation as essential.

4.8.6 Guidance and Counselling

This section includes item 65 to 67. In this section also almost all the teachers (more than 95%) have recommended all the activities in the section as essential. It may be observed here that as the higher secondary students will be in adolescent stage and as the developmental stage is described as a period of stress and strain, the teachers' functions of guidance and counselling become very significant.

4.8.7 Co-curricular Activities

This section includes items 68 and 69. Majority of the teachers (more than 80%) think that teachers may be involved in organising activities such as field visits, debates, exhibition and excursion (item 68). Some teachers (21%) think that all the teachers need not be involved in organising music in the school. However, majority of the teachers (79%) seem to think that teachers should be involved in organising music programmes in the school co-curricular activities.

Most of the teachers (i.e. 93%) agree that teachers should be involved in functions like Independence Day, Republic Day etc., and more than eighty per cent of teachers think that teachers could be involved in activities such as N.S.S. and N.C.C. (item 69).

This clearly indicates that the higher secondary teachers recognise the importance of observance of national days and involving in organised nation building social activities through N.S.S. and N.C.C.

4.8.8 In-service Training

This section includes items 70 to 74. In this section also almost all the items are considered as essential by majority of teachers (i.e. more than 85%). However, some teachers do think that participating in activities such as workshop, symposium and conference as difficult for they are very few in number and further, the teachers would be too busy in their day to day teaching activities. However, it may be observed that majority of the teachers have recommended that higher secondary teachers have to participate in activities such as workshop, symposium, conference (more than 80%).

The other activity which some teachers (13%) seem to find difficult to carry out has been conducting some research projects in collaboration with the research institutes (item 74). This may be due to lack of proper extension activities on the part of research institutions. However, majority of the higher secondary teachers (87%) have agreed that higher secondary teachers should be involved in some research projects in collaboration with the research institutes.

To sum up majority of the teachers (i.e. more than 80%) have recommended almost all the activities in the questionnaire as essential for higher secondary teachers.

- 4.8.9 The last item in the Job Analysis Scale is an open ended item inviting comments, suggestions from higher secondary teachers about their functions. The responses received from all the teachers have been content-analysed and important comments and suggestions regarding functions are presented in the following section:
- * Teachers should teach students with love and understanding of individuals difficulty. Positive reinforcement should be given when a student gives the right answer. He has to conduct periodical tests. In practical subjects such as Biology, the students should be taken to the fields, gardens, near by tank, river to study the types of vegetation and animals. The higher secondary teacher has to make effective use of audio-visual aids.
- * The conflict between the principals, teachers and students existing in schools run by educational trust should be avoided.

- * The teacher should help students in forming self learning habits.
- * At the higher secondary level teachers have to prepare plan for theory and practical simultaneously.

The teacher should guide the students in preparing charts, observation tables required for practicals. He can effectively utilize project work and assignment method. Lecture and discussion method could also be utilized (for theory as well as practicals).

The theory evaluation should be based on the understanding of the concepts, principles, application of the same to solve certain problems.

In practical examination the emphasis should be on the understanding of practical (experiments), preparation of suitable observation table, proper use of formula.

It is very essential that the teacher explains the experiment and gives proper instructions before starting of the practicals.

- * The higher secondary teacher should be aware of modern educational thoughts.
- * Higher secondary teachers should be free from clerical work e.g. taking attendance (monthly registers), fee collections, preparing progress cards. Extra teacher should be appointed to check home work, assignment and compositions.
- * Project method, group discussion method should be considered very essential for teaching at higher secondary level. Teacher should be given opportunity to take part in seminar, symposium, workshop, conference.

- * The teachers have to relate the subject to the daily life experiences of students.
- * The higher secondary teacher should encourage self study by students.
- * The teacher should be involved in curriculum planning.
- * Teacher should create interest in students to study the subject matter.
- * Higher secondary teachers should be allowed
 - to interact at school level, with other higher secondary school teachers.
 - The teachers should visit other schools and observe the working pattern and discuss with the staff and students.
 - Apart from academic courses, cultural and creative activities should be provided and encouraged.

The comments and suggestions given by higher secondary teachers about functions have added some new functions not included in the previous restricted type of items. Some comments have elaborated the specific functions of teachers with regard to the theory and practical examination. Some teachers have emphasised rightly the type of relationship the teacher should have with his colleagues, principal and students. Some teachers have emphasised the field activities and the role of teachers. Some teachers have emphasized the importance of the use of project method and group discussion method at higher secondary level. The need for involving teachers in curriculum planning has been highlighted. The need for the teachers to interact with

other higher secondary school teachers and study their working pattern has been emphasized.

4.9 The relationship between the identified functions and the related components of training programme for higher secondary teachers.

The interpretation of data in the previous sections clearly indicate that all the functions listed in the Job Analysis Scale are essential for higher secondary teachers. The teacher training programme designed for the higher secondary teachers should equip the trainees properly with skills to carry out the functions effectively. In the following paragraphs an attempt has been made to show the relationship between some of the important functions of higher secondary teachers and the training components emerging to fulfil the training need.

Majority of the teachers in the study have recommended that maintaining good relation with the colleagues (item 5) is a very essential function. The higher secondary teacher trainee has to learn to keep good relation with the colleagues. In the pre-service training, mthe student teachers can role-play and solve the human interaction problems. Further, when the teacher trainee undergoes the internship training, the student teacher learns to maintain good relationships with the colleagues in the actual school situations, also provides some opportunities for the teacher trainee to learn to study the behaviour patterns of colleagues and know the needed relative adjustment to be made for carrying out effective interaction.

Preparation of the time-table is identified as one of the important functions of teacher (please refer p249). To train the student teachers in this activity, the trainees are required to prepare the time-table as a practical

requirement and further, the trainees may also do this activity during their internship programme. The student teachers get training in the essential functions such as maintaining school records of pupil work and progress and other relevant information, maintaining attendance registers in the internship training. Further, the teacher learns to participate in essential activities such as staff meeting, decision making etc. during this school based teacher training programme (i.e. Internship and climical activities). One of the functions which has been found very essential by most of the teachers (99%) has been that of maintaining good relation with students (item The student teachers learn this art while undergoing the clinical activities of the pre-service training programme. To fulfil the functions such as item 17 to 20, an attempt has been made to include the topics viz., content analysis, conceptual organisation etc. in their theory courses. Specific training is provided to student teachers to prepare lesson plans, scheme of work. The functions such as developing skill of speaking clearly and fluently to individuals can be achieved through micro-teaching sessions. Training in selecting appropriate methods (item 25), using appropriate audio-visual materials and other resource materials like books and pamphlets etc., (item 44, 45), skills of questioning, giving illustration, black board work, organising group discussion can be effectively developed through micro-teaching programme. The above mentioned functions can be further developed during the internship programme. The student teachers get training in posing problems to students (item 34), allowing students to hypothesize (item 35), asking students to interpret data (item 36), facilitating students to draw proper conclusions (item 37), involve students in discussion (item 38), utilizing experimental data for making

generalizations, (item 39), making the pupils aware of their strengths and weaknesses (item 42) during microteaching as well as in internship training.

To fulfil the function (item 46), the teacher trainees are required to prepare assignments as part of their practical work in the theory courses.

The student teachers (science teachers) get training in laboratory work (item 50 to 59) through the following means:

- i) The teacher trainee is apprenticed to the laboratory co-ordinator to learn about the maintenance of laboratory.
- ii) The student teacher actually conducts some practical classes.
- iii) The student teacher guides the students in doing experiments.

To train student teachers in the evaluation activities (item 60 to 64), the student teachers have been provided a course on educational evaluation and they are required to set question papers, construct tests, evaluate performance of students as part of their practical activities.

The student teacher tries to equip himself in the functions of guidance and counselling (item 65 to 67) during his training in clinical activities as well as during the internship programme.

The student teacher gets training in organising co-curricular activities (item 68 and 69), during the clinical activities and internship programme. The student teacher is equiped with the fundamental concepts

needed for carrying out the research project. As the part of the requirement of the course, he does the project work (item 71 to 73).

During the course of the teacher training, the student teacher prepares some papers and presents them in the seminar and he learns the mechanics of the seminar (item 70 i). Consequently, he learns the value of seminar and develops a favourable attitude towards seminar. Further, he may suitably adopt this seminar technique in his instructional methods.

The above discussion clearly shows that there is very close relationship between the functions of the higher secondary teachers and the emerging training components for higher secondary teacher training.

REFERENCES

- Dove L.A. (1986), Teachers and Teacher Education in Developing Countries, London, Croom Helm Inc., P.110.
- 2. Singh R.R. (1986), Education in Asia and the Pacific Retrospect: Prospect, UNESCO, Bangkok, P.167-168.
- 3. List of Higher Secondary Schools revised upto 1981, Gujarat Secondary Education Board, Gandhinagar, 1981.