

CHAPTER V

ANALYSIS OF DATA

Contents :-

- 1) Management
- 2) Funds
- 3) Selecation of Schools
- 4) Infrastructure facilities
- 5) Staff
- 6) Types of Students
- 7) Selection of courses
- 8) Course structure (Syllabus)
- 9) Instructional material
- 10) Linkage
- 11) Guidance and admission
- 12) Employment

This chapter is devoted to analysis of data collected from the requirement of objective No. 2 as stated in chapter 1. Each issue of Vocationalisation of education is discussed at length as to how it was proposed to be implemented by national level agencies and in reality how it has been implemented in the Union Territory of Delhi.

Major issues discussed in this chapter include the following:-

1. Management;
2. Funds;
3. Selection of Schools;
4. Infrastructure facilities;
5. Staff;
6. Types of Students;
7. Selection of Courses;
8. Course Structure (syllabus)
9. Instructional material;
10. Linkage;
11. Guidance & Admission;
12. Employment.

1. MANAGEMENT

Management is necessary for running any scheme or framing a policy or implementing it through an administrative agency. And in a country like ours, any new scheme to achieve some degree of success needs a strong policy decision as well as continuous

implementation over a reasonably long period of time. The policy itself, however good it might be in principle, will not be successful if it is not implemented with purposeful preservance and unremitting efforts. And such effort are required right from the policy making stage to the level where it is being put into practice.

Report of the National Working Group constituted by the Chairman of All India Council for Technical Education has given the model of Management structure of the Vocationalisation of Education, from National level to institutional level. The structure is as under :-

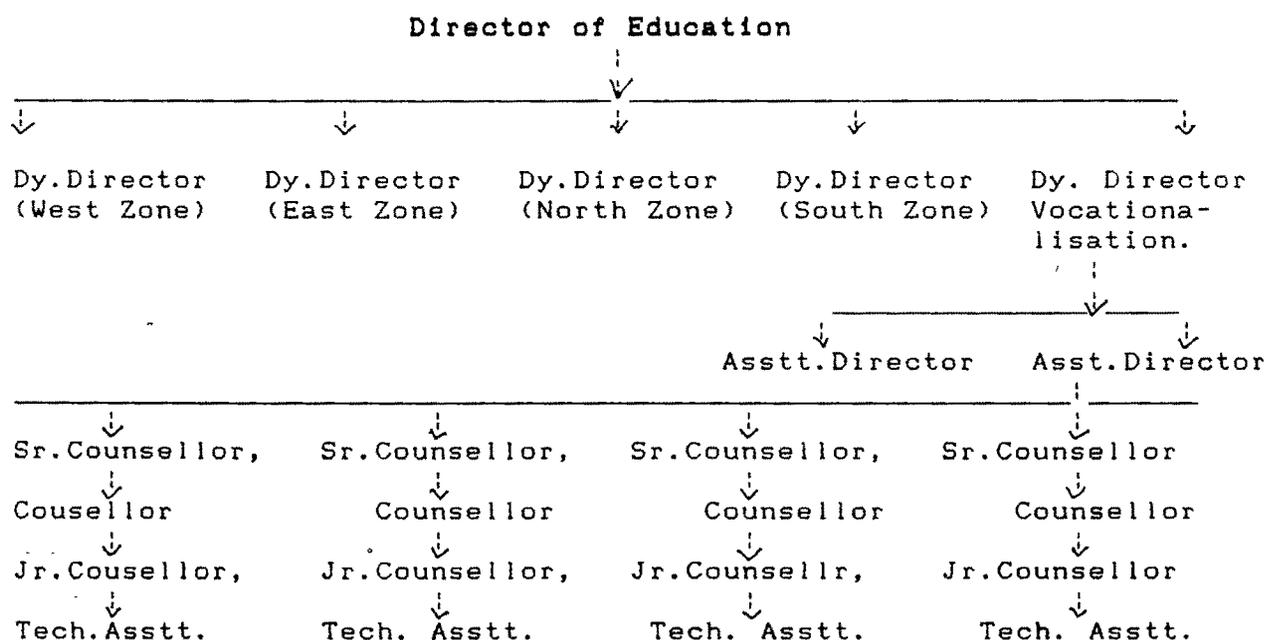
LEVEL	FUNCTIONS			
	Policy & Co-ordination.	Research & Development Evaluation & monitoring	Administration and implementation	Exams & Certification
National	J.C.V.E.	N.C.E.R.T.	Min. of Education	AIBVE, NBAE, CBWE.
Regional	-	RCES, TTTIs	Board of apprenticeship and training..	-
State	SCVE	SCERT	State Min. of Education	State Board of Exam
District	Dist. Vocation-co-ordination Committee.	Dist. Composite Training centre	Dist. Vocational education Officer	-
Institution	Advisory Committee	Curriculum development & placement Cell.	Principal & Staff	-

It is found that the suggested management structure from National to Institutional level has not been implemented. In the Union Territory of Delhi, Director of Education carried out all the functions such as policy formation, administration, implementation and examination.

Functions like co-ordination, research, development and monitoring are not carried out in the Directorate of Education.

Few independent bodies like NCERT, NIEPA, Dept. of Manpower Planning are engaged in Research work, development of curriculum, planning and orientation of teachers. There is no institution which is responsible for co-ordination of the activities of all these institutions.

Administrative setup, designed to be implemented in the Union Territory of Delhi is as under :-



The suggested grades of these Officers are as under :-

Director :
Dy. Director : 1300-1700.
Sr. Counsellor : 1100-1600.
Counsellor : 650-1200.
Jr. Counsellor : 550-900.
Tech. Asstt. 330-550.

According to this plan, Dy. Director of Education, assisted by two Assistant Directors is to be responsible for all administrative work.

Sr. Counsellor, Counsellor and Jr. Counsellor are responsible for in-service training of teachers and for carrying out occupational surveys to assess local needs.

The Researcher found that at present, Department of Vocationalisation of Education is headed by Dy. Director of Education who is responsible for day to day administration and implementation of the scheme. He is assisted by one Sr. Counsellor only.

At the institutional level vocational courses are taught by full time and part time teachers, under the general supervision and administration of the Principal of the institution. The position of teachers is discussed in detail in the following pages under the heading 'staff'.

During the discussion, Sr. Councillor Shri B.P. Singh stated that problems regarding syllabus, evaluation, recognition of the courses will be solved as and when the institution like JCVE,

NCVE, CIVE, as suggested by the Working Committee start functioning.

Mr. Veer Raghvan, Special Secretary, Ministry of Education said that CIVE is responsible for formulating 'bridge courses' and to implement new innovations. This Council will prepare model syllabi.

CONCLUSIONS :

The problems such as drafting of suitable syllabus, linking education with job, framing of bridge courses, popularising vocational courses etc. which are reckoning to-date and posing hindrances in the success of vocationalisation of education are mainly due to weak Management. Once a strong edifice is built rest can be taken care of. Therefore, there is a need for strong and well planned management systems.

There is no agency which is solely responsible for carrying out programmes relating to vocationalisation. The Researcher noted that there is confusion in the minds of planners and administrators as to whether a particular task comes under their jurisdiction or some one else's. As a result vocationalisation at Plus Two Stage has not have caught the desired level of momentum and no institution is taking the initiative to rectify the situation. Though the tasks and institutions are well defined in the implementation document of National Policy 1986, yet there is a lacuna in setting up these institutions such as JCVE, NCVE, CIVE, etc. It is necessary for the Government to take immediate steps to establish these institution if vocationalisation of education

is to be made successful.

2. FUNDS

Since the entire vocational education system is designed on new concepts, it is in a state of continuous evolution. New ideas are generated, tested and introduced during operations. This requires lot of financial resources. Funds are required for providing infrastructure facilities, training of teachers, paying stipends and preparing of instructional materials, research and development work, evaluation and inspection etc. for apprenticeship training..

A working group of the Planning Commission had proposed on July 10, 1984, an outlay of Rs. 1323 crores for the Secondary education for the seventh plan. This includes Rs. 304 crores for vocationalisation of higher secondary education (on which great stress is being laid during the seventh plan, which was to be launched in the year 1985). Vocational Education is proposed to be introduced in 7,00 schools, i.e. 14 percent of the total number of Secondary schools in the country.

Of the total outlay for the vocational stream, Rs. 126 crores would be for the Central Sector for a 100 percent centrally sponsored scheme for 2,000 schools and Rs. 178 crores in the State Sector for 5,000 schools.

There are two types of schools in Delhi :- One are Government Schools maintained solely at the Government expenses and

the other are Govt. aided schools whose 95 percent expenditure is born by the Government and the management of these schools arranges for the remaining 5 percent.

During the discussions with the teachers and Principals of Government run institutions, the researcher noted that there was no complaint regarding availability of funds. According to them, the funds allocated are adequate but grants are released late which causes in-convenience, Government aided schools feel inadequacy of funds and Principals of these schools suggested that Government should meet the total i.e. 100 percent expenditure instead of 95 percent, particularly because the managements do not provide their share of 5 percent. The beneficiaries, though, did not make any complaint about the inadequacy of funds, yet shortage of equipments for practicals was a general complaint. Students of certain trades, such as 'textile & designing', 'banking' & 'typing' do express their problem of not being provided with raw materials by schools and that they have to buy the materials and get the tools repaired at their own expense, on which they have to spend quite a lot of time. According to one passed out student, funds allocated by the Government are not being properly used and the benefit is not reaching the beneficiaries.

CONCLUSION :

It can be safely concluded that there is no paucity of funds either in Government owned schools or in aided schools, but scarcity of funds is felt because of delayed sanctions and improper usage.

3. SELECTION OF SCHOOLS

In 1977, Ministry of Education and Social Welfare had set up a Working Group to make necessary preparations to launch vocationalisation of education at Plus Two level in the Union Territory of Delhi. The group laid down the following criteria for the selection of schools for the courses :-

- (i) Industrial, commercial and related occupational, development and economic activities in the area.
- (ii) Availability of training facilities in the vicinity in existing technical, vocational, industry and commercial agencies for providing training to the students wherever required.
- (iii) Possibility of a large number of students opting for the courses in the locality.
- (iv) Availability of class room accommodation, laboratory and library facilities and equipment if any, required for vocational programmes.
- (v) Past academic record of the school.
- (vi) Availability of enlightened, motivated, articulate and enthusiastic group of teachers with a strong commitment to vocationalisation.
- (vii) Financial resources of the management in case of private schools.
- (viii) Capacity to secure the support and assistance of the community and industry around.

On the basis of these guidelines, a few schools were recommended for starting vocational Courses and the justification to start the recommended Courses was also given. However, Courses were introduced not on the basis of recommendations or justifications, but on the basis of a performa which was filled by Princi-

pals of the Schools. In this performa, Principals were asked to give their preferences for the Courses they would like to start and whether any qualified teacher was already working in the school who could be entrusted with the responsibility of running that vocational course and the number of rooms and lab facilities which could be made available for running the Course in the school. (Performa given at Annexure X)

The result was that the courses offered in schools were not based on the recommendations of the Working Group. The researcher found that courses offered in those schools were not the same as recommended. A list of courses offered as compared to what had been recommended is given below.

Table No. 5.1

Recommended courses and actually offered courses in Delhi.

1.	2	3	4
School	Justification	Course Recommended	Course Offered
DCM Kishan Ganj.	Facilities available to introduce course : Food preservation, costume designing & tailoring, electronics	1. Food Processing & preservation 2. Marketing & Salesmanship 3. Electronics 4. Textile designing & Tailoring 5. Textile design & block printing.	1. Marketing & Salesmanship 2. Auditing & Accountancy. 3. Office Management & Secretarial practice
Birla Higher Secondary School Kamla Nagar	Management can provide facilities for vocational courses in Birla Ganesh Mill. Accommodation facilities	1. Book Keeping & Accountancy 2. Stenography 3. Textile designing & block printing. 4. Blue prints	1. Accountancy & Auditing. 2. Office management & Secretarial practice.

	available, Management is financially sound.	drafting, designs & graphics. 5. Advertising & salesmanship. 6. Administrative Management	
Nav Shakti Rouse	Facilities available in G.B. Pant Hospital, Irwin Hospital, Sen's Nursing home, for nursing & midwife courses	1. Nursing/Radiographer 2. Child care & nutrition 3. Occupational therapist. 4. Nutrition & food preparation. 5. Receptionist and PBX operator.	Office Management & Secretarial
S.G.H.K. Bangla Sahib	Management is financially sound, facilities available.	1. Office management & Secretarial practice 2. Stenography. 3. Cosume Designing & tailoring. 4. Hotel reception & Book keeping 5. Blue Printing & draft designing. 6. Music.	1. Stenography 2. Dress Design & making.
Lajpat Nagar No.1	Pramedical Courses can be started, advantage can be taken of Mool Chand Hospital	1. Business Management. 2. Marketing & Salesmanship. 3. Hotel Reception & Book Keeping. 4. Restaurant, Canteen management	1. Textile & Designing.
Sarojni, Nagar No.4 & No.1.	Facilities available Centre would meet the require-	1. Stenography. 2. Medical Lab 3. Dental Aggienist 4. Book Keeping & d accountancy. 5. Electrical equipment & home appliances.	1. Optalmic technique. 2. Office Management & Secretarial Practice.
Tilak Nagar	Facilities available I.T.I. can be used	1. Office Management & Secretarila Prac. 2. Marketing & Salesmanship. 3. Costume designing & Tailoring. 4. Nutrition & Food preparation. 5. Kindegarden and	1. Banking 2. Textile & Designing

		primary teaching.	
Punjabi Bagh C.S.S.S. School	Industrial facilities available both at Karampura and Mayapuri Industrial Complex	1. Receptionist & PBX 2. Costume designing & tailoring. 3. Commercial art. 4. Nutrition and food preparation.	1. Dress design & making.

The above table makes it clear that recommendations were not followed and Justifications for starting courses were not even looked into. The glaring example is that of Nav Shakti, Rouse Avenue School, for which para medical Courses were recommended as there were a few medical hospitals in the vicinity, but the courses offered in the school are on office management and secretarial practice.

Not only this, teachers appointed to teach the Vocational courses are not vocationally trained. Analysis of teachers' qualifications reveal that all Commerce Based Courses are being taught by P.G.T. Commerce, Home Science based vocational courses are being taught by P.G.T. Home Science. In a few schools, vocationally trained teachers are appointed on part time basis.

CONCLUSION :

Courses are offered in schools without due regard to the needs and facilities available for the vocational courses in the vicinity or the area. No effort was made to utilise the local resources available for vocational training or guidance . Choice of the course was based on the whims of the Principal or the management of the school who too appears to have opted for the courses half heartedly without looking into the merits of the

course and how the students shall be benefited.

The result is that the Courses offered in the schools are not based on the economic activity of the area.

4. INFRASTRUCTURE FACILITIES :

To start or implement a course, facilities for instructions are needed and if the Course involves practicals, requirements become greater. According to the report of Working Group, the requirements for vocational courses are to be met as under :-

"The physical resources consist of space, equipments and consumables. In the organisation of vocational education, physical resources are the costliest. Maximum use, therefore, will have to be made of the existing resources. This can be done by requiring all the selected institutions to organise all levels of courses, e.g. certificate and diploma, formal and non-formal, full time and part time, by introducing multiple shifts. Avenues should also be explored to persuade the employing organisations to provide facilities for vocational training in the industry. "

This issue of 'infrastructure facilities' is further discussed under separate sub-headings of 'space', 'equipment' and Consumable materials.

Space : Response of the Teachers, Principals and students, who were requested to express their opinion about space available in their schools to conduct practical classes, is shown in the Table

below :-

Table NO. 5.2

Table showing the response regarding availability of Space:

Query	Response (in percentages)					
	Students:		Teachers:		Principals:	
Whether Space available for the practicals is sufficient?	Yes	No	Yes	No	Yes	NO
	49	39	52	48	75	25

According to the Table, most of the Principals feel that space available in their schools for the practicals is sufficient, parportion of such Principals being 75 percent. On the other hand teachers and students are divided in their opinions. Yet the percentage of teachers and students having the view of sufficiency of the Space, is greater to those who feel that the space is inadequate. 52 percent teachers as against 48 percent expressed adequacy of the space and 49 percent students as against 39 percent told that the space available for their practicals is enough.

The researcher has also sought the opinion of students of different courses regarding the availability of space for the practicals of their particular course. Their responses are shown in the following table :

Table No- 53

Table showing the response of students of Various Courses.

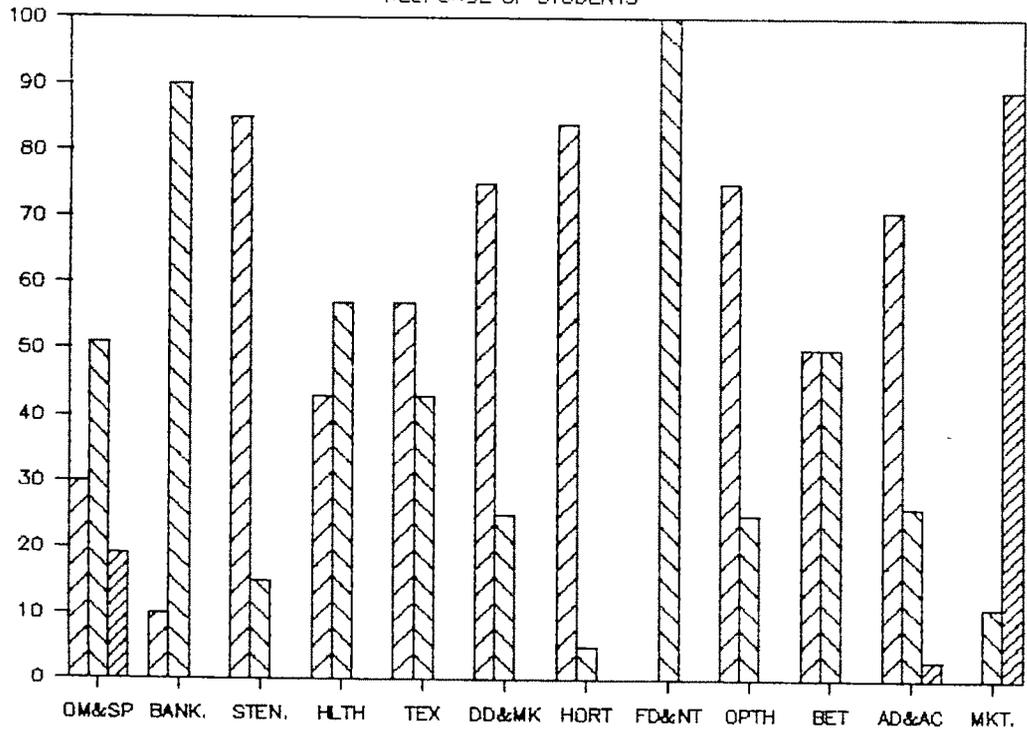
Regarding availability of space for their courses in the School.

S.No.	Courses	Response		
		Yes	No	No Response
1.	Office Management Secretarial Practice	30	51	19
2.	Banking	10	90	-
3.	Stenography	85	15	-
4.	Health care & Beauty Culture	43	57	-
5.	Textile & Designing	57	43	-
6.	Dress Design & Making	75	25	-
7.	Horticulture	84	05	-
8.	Food & Nutrition	-	100	-
9.	Ophthalmic	75	25	-
10.	Basic electrical technology	50	50	-
11.	Auditing & Accounting	71	26	03
12.	Marketing & Salesman Ship	-	11	89

It is evident from the table above that students are divided in their opinions. Students of Commerce based Courses do not feel scarcity of space, particularly because they do not have experiments /practicals which require space. Students of practical oriented courses especially students of Food & Nutrition and Dress design and making, however, feel space constraint.

AVAILABILITY OF SPACE

RESPONSE OF STUDENTS



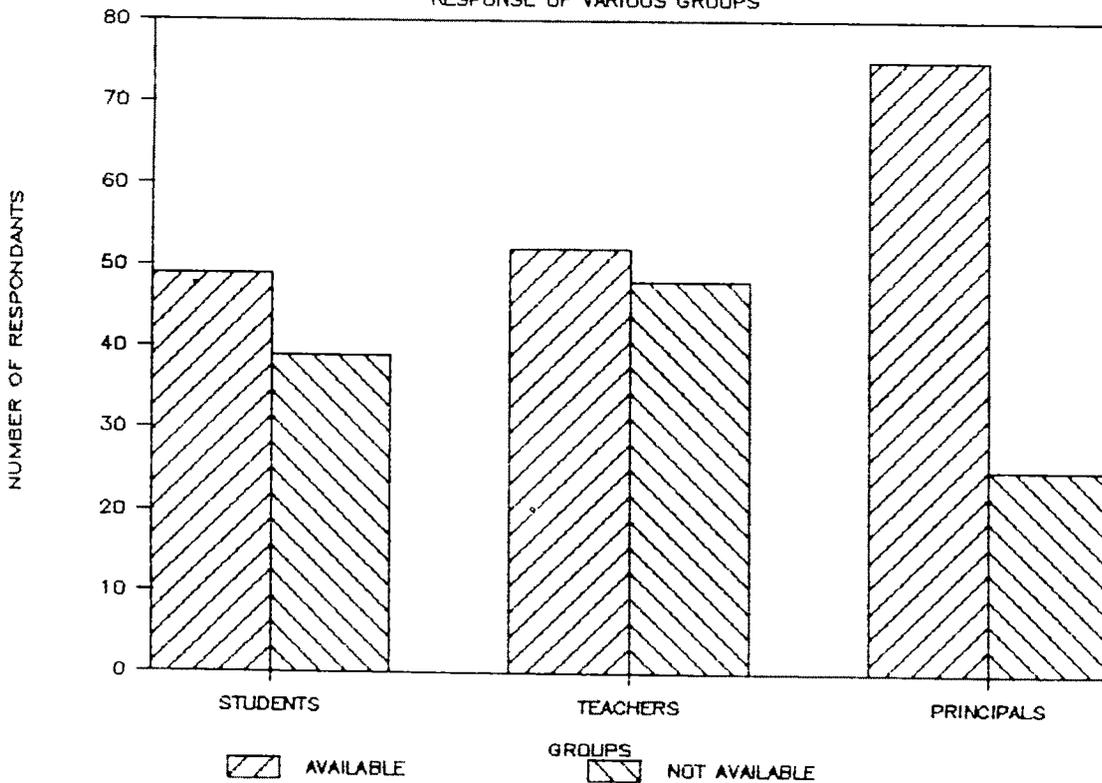
SPACE AVAILABLE

NOT AVAILABLE

NO RESPONSE

AVAILABILITY OF SPACE

RESPONSE OF VARIOUS GROUPS



AVAILABLE

GROUPS NOT AVAILABLE

To assess the situation, the researcher went for an on the spot study to the schools and found that Commerce based courses are taught in class rooms like other academic courses. And there were one or two class rooms allotted for these course according to the number of students in the course. For horticulture course, the schools have sufficient land for practicals. For typing, dress design & making, textile and designing, health care and beauty culture courses, it was seen that proper laboratory arrangements were not available for the practical work. The researcher found that one or two class rooms are usually allotted as laboratories for these courses. In some schools, the same room is used as Laboratory and lecture hall. During discussions, the teachers and principals admitted that space provided in their schools for the practicals was in-adequate.

Glimpses of space in schools : The researcher, through her field visits, noted the following :-

1. Students were using verandah of the school for practical work in G.S.S.S. School Tilak Nagar.
2. Students were given one full separate wing which had many class rooms and open space for practicals in G.G.S.S.S., Lajpat Nagar. 1.
3. In Guru Nanak G.S.S.S. Singh Sabha Road, students were using the terrace of the school for the practicals.
4. Two big rooms were duly furnished as Laboratory in Birla Boys School.
5. In G.G.S.S.S. Punjabi Bagh, two rooms wre being used for vocational courses for the Course Lecture as well as Practical.
6. Big piece of land was provided for the Vocational Course in

G.B.S.S.S. Poothkhurd.

Equipments : In response to the question " Whether all the equipment needed for the practicals is available, the response recieved is as under :-

Table No. 5.4

Table showing response of Teacher, Students and Principals of the availability of equipments in the school.

Question:	Response in percentage					
	Students		Teacher		Principals	
	Yes	No	Yes	No	Yes	No
Whether Equipment for practicals is available?	39	48	45	46	58	17

The table shows that percentage of students feeling inadequacy of equipment is higher than the percentage of teachers and principals.

Table 5.5

Table showing response of students of different Courses on availability of equipments to do practicals:

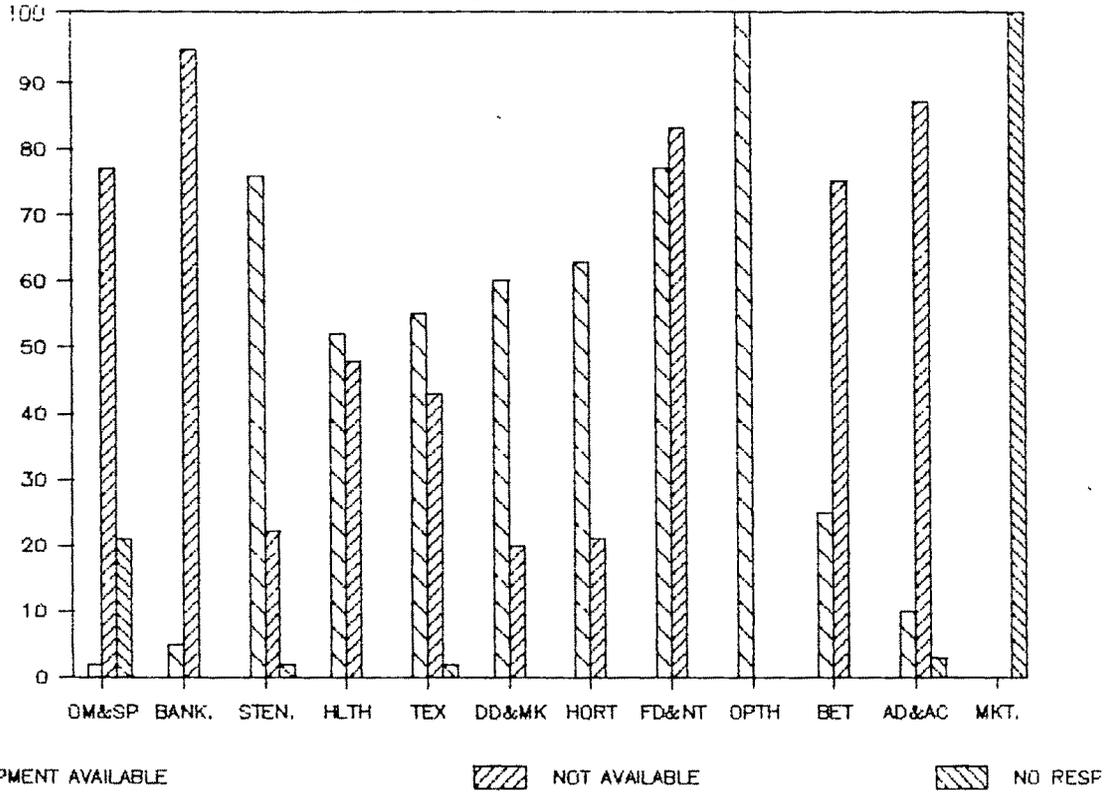
Courses	Students' Response (in percentages)		
	Yes	No	No Response
Office Management & Secretarial Practice:	2	77	21
Banking	5	95	-
Stenography	76	22	2
Health Care & Beauty Culture	52	48	-
Textile & Designing	55	43	2
Dress Design & Making	60	20	-
Horticulture	63	21	-
Food & Nutrition	77	83	-
Ophthalmic	100	-	-
Basic Electrical Technology	25	75	-
Accountancy & Auditing	10	87	3
Marketing & Salesmanship	-	-	100

It is clear from the table that in all the vocational courses (except the two i.e. Food & Nutrition and basic electrical technology) which have practical work, positive response is higher than the negative response .

During the discussion it was revealed that Mixer & Juicer were not available to the students of 'food & nutrition Courses,

AVAILABILITY OF EQUIPMENT

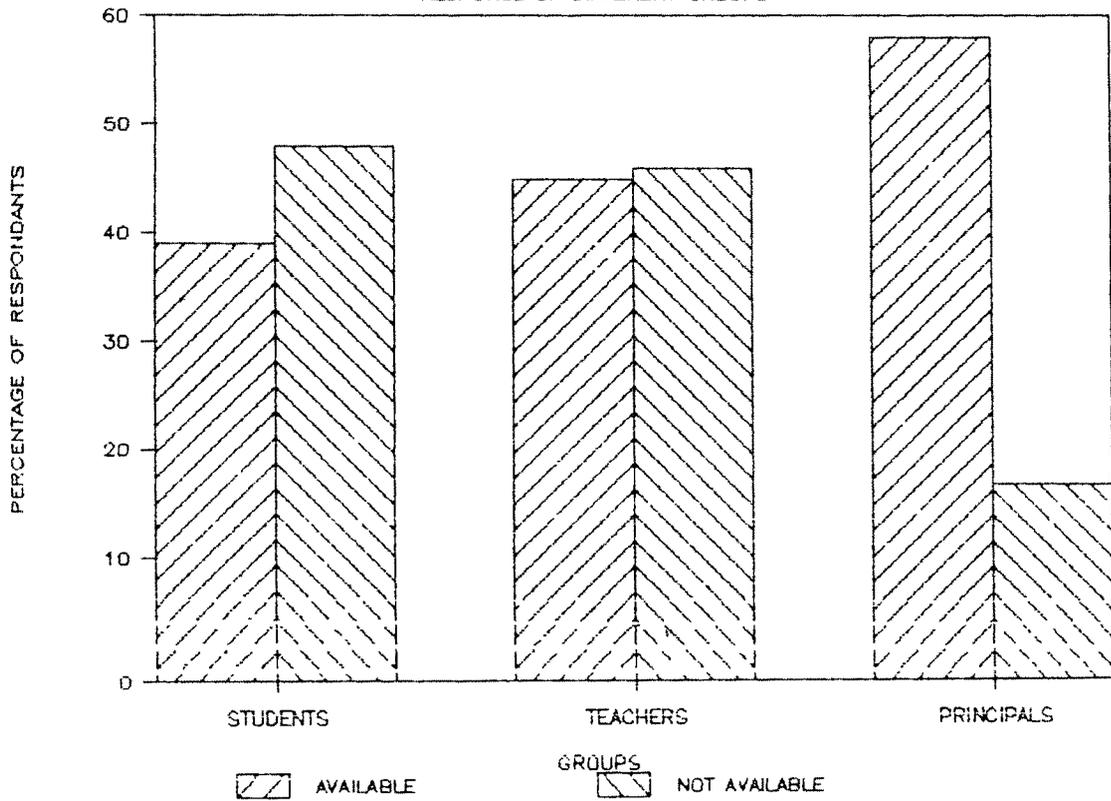
RESPONSE OF STUDENTS OF VARIOUS COURSES



VI

AVAILABILITY OF EQUIPMENT FOR PRACTICALS

RESPONSE OF DIFFERENT GROUPS



and for the students of Electrical Technology though electrical gadgets were there in the schools yet these gadgets are not being used by the students because of non-availability of trained and qualified teachers. Principals and teachers also complained about lack of equipment. Though most of the schools are provided with essential equipment yet the advanced machines required for proper training and development of skills, are not available e.g. printing Machines etc.

Students expressed the view that because of poor maintenance of equipments, they are not getting full advantage of the equipments available in their schools. Students of typing complained that they are asked to join private coaching centers for practicing.

A Glimpse of Equipments available in schools:

1. Students are not allowed to touch TV, Radio in the fully equipped laboratory of basic electronic technology course in Birla Boys S.S. School.
2. Students cannot use swing machines because they are out of order and mechanic visits the schools only once in a fortnight.
3. Students join private coaching centers for their typing practice .
4. Students have to bring their own models for Health Care & Beauty Culture Course in G.G.S.S.S. Sarojini Nagar.

Consumable Items: Acute shortage of consumable items is felt, as

there is no provision for consumables in the allocated funds. Students and teachers told the researcher that to meet the day to day expenditure of the courses, students have to contribute and for that the teachers have to take the initiative and also to pool in the contributions and buy the needed articles . Researcher was told that a student who is unable to make contribution, is not denied use of articles. Researcher noted that there is great enthusiasm in students and teachers and they are quite hopeful that one day the situation will improve and at present they are taking the problems sportingly and with high spirits.

CONCLUSIONS: The following conclusions can be safely drawn from the discussion above, regarding infrastructure available in schools:

1. Space is sufficient for 'Horticulture', Textile & Designing', 'Stenography', 'Health care & Beauty Culture' Courses. Shortage of space is felt greatly by the students of Food and Nutrition Courses.
2. Theory oriented courses are taught in lecture halls like any other academic course.
3. No separate wing or classrooms or laboratories have been constructed for these courses.
4. Although Equipment is available in schools, a few schools face problems in their proper use because of poor maintenance and non-availability of well trained teachers.
5. There being no provision of funds for consumable items, the students and teachers find it difficult to conduct practicals regularly.

5. STAFF

The quality of a Vocation teacher is another factor of prime importance for making vocational programme successful at the plus two level, as it is the vocational teacher, who steers the entire teaching learning process as per his abilities, dedication and commitment. According to the report of Working Group 1977, 'Teachers in the existing institutions and people from industry should be utilised for teaching on part time basis. Pre-service and in-service training for teachers of vocational education should be organised.'

In the light of the aforesaid recommendation of the Working group, the researcher analyzed the teachers with reference to their qualifications, job conditions, work load etc..

The researcher's analysis shows that theory based courses are taught by full time teachers and for practical oriented courses, except the Course of Basic Electrical Technology, part time teachers are appointed. This analysis is shown in the following table :-

Table No. 5.6

Table showing the Type of Teachers teaching Vocational Courses:

Courses	Type of Teachers:
1. Textile & Design	Full time & Part time
2. Dress Design & Making	Part time
3. Basic Electrical Technology	Full time
4. Health Care & Beauty culture	Part time
5. Ophthalmic	Full time
6. Basic Nutrition & Food Preparation	Full time
7. Applied Horticulture	Full time & Part time
8. Marketing & salesmanship	Full time
9. Stenography	Part time
10. Office Management & Secretariate Practice	Full time
11. Auditing & Accountancy	Full time
12. Banking	Full time

Qualification of these teachers, as analysed by the researcher is shown below :-

Table No. 5.7

Qualifications of teachers of vocational courses

S.No.	Name of Course	Qualification of teachers	
		Part time	Full time
1.	Health Care & Beauty Culture	Diploma in Beauty Culture	-

contd.

S.No.	Name of Course	Qualification of teachers	
2.	Dress Design & Making	Diploma in cutting tailoring, Knitting & Designing.	-
3.	Basic Electrical Technology	-	M.Sc.Maths P.G.T
4.	Food Nutrition & Food Preparation	-	M.Sc. Home Sc. P.G.T.
5.	Applied Horticulture	B.Sc. Agriculture	M.Sc. Agriculture
6.	Ophthalmic Technique	Graduate in Ophthalmic Technique	M.Sc. Bio.Sc. P.G.T.
7.	Textile & Designing	Diplome in Art & Craft	M.Sc./M.A Painting P.G.T.
8.	Stenography	Diploma in Stenography	
9.	Commerce based courses		M.Com. P.G.T.

The analysis shows that teachers are well qualified. All full time teacher are Post graduates and the Part time teachers are diploma holders. But even with these qualifications, do these teachers consider themselves fully competent. More importantly do the students and principals also consider them good enough to teach their respective Course ? The response received by the Researcher, to the aforesaid question, is shown in table below :-

Table No. 5.8

Competency of teachers to teach Vocational courses

(Figure are in percentages)

Item	Students		Teacher		Principals	
	Yes	No	Yes	No	Yes	No
Teachers Having Practical Experience.	67	29	58	39	48	52
Teachers considered competent to teach theory.	61	17	94	06	92	08

It is evident for the above that students principals and even teachers themselves feel that they can teach theory part of the vocational courses better than the practical part.

A suggestion was made that to improve the teaching efficiency, the teachers should be given Vocational orientation. But it is found that very few teachers are vocationally oriented. The table below shows response of teachers regarding orientation for the Vocational Courses :

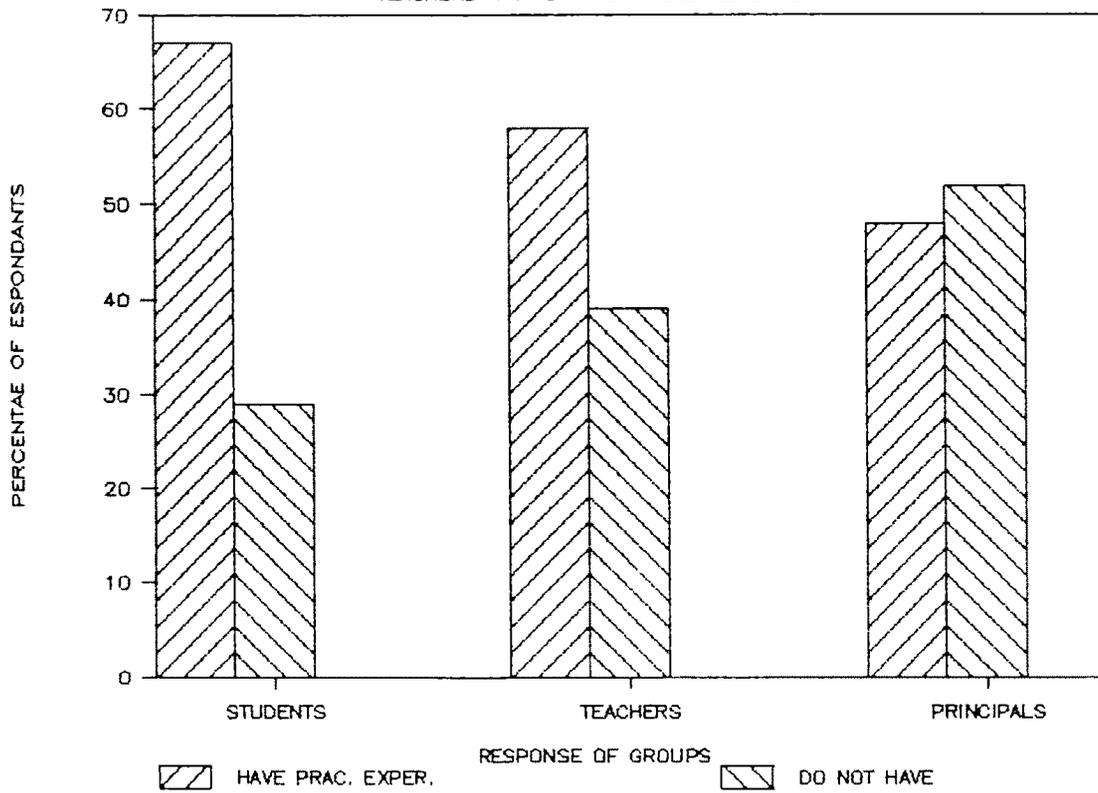
Table No. 5.9

Response regarding Orientation:

Item	Teachers' Response in percentages	
	Yes	No
Orientation is given to the vocational teachers to teach the the Courses.	21	73

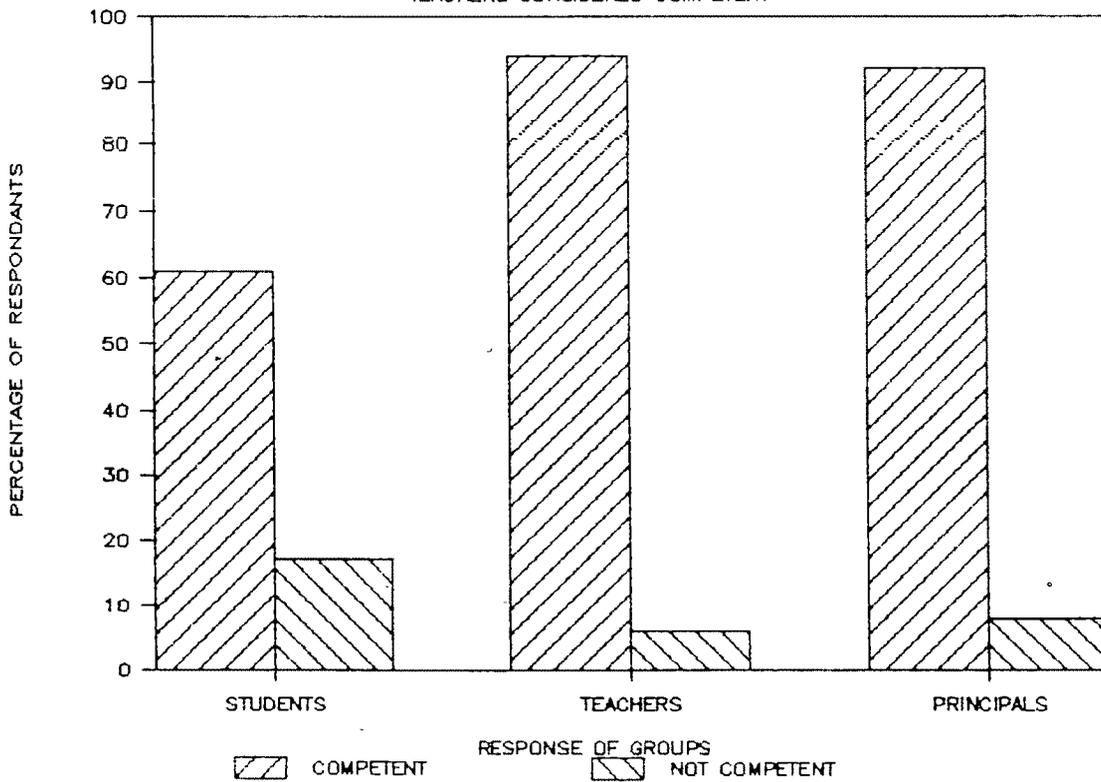
COMPETENCY OF TEACHERS

TEACHERS HAVING PRACTICAL EXPERIENCE



COMPETENCY OF TEACHERS

TEACHERS CONSIDERED COMPETENT



Qualifications of teachers of Vocational courses do not match the required qualifications for the efficient teaching of the Course. The existing teachers of other academic courses of the school are not suited for the vocational courses started in the school. Also the part time teachers who could have lended their expertise have not been appointed for all the courses. Even the orientations given to the teachers have been about the Philosophy of the scheme and not for the improvement of their competency to teach the Course.

Each school is facing problem of shortage of teaching and helping staff. In the absence of the helping staff, teacher has to do all the spade work along with the teaching. The work load on the teacher is thus quite heavy. The table below shows the academic work load of teachers.

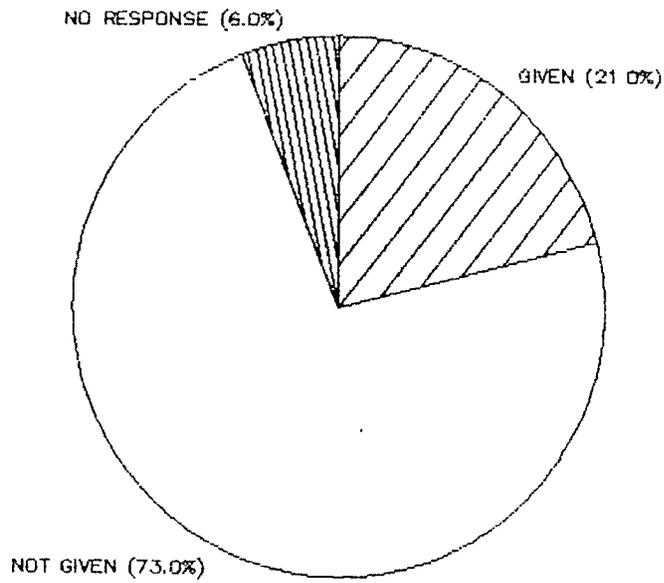
Table No 5.10.

Table showing the work load of teachers of Vocational Courses:

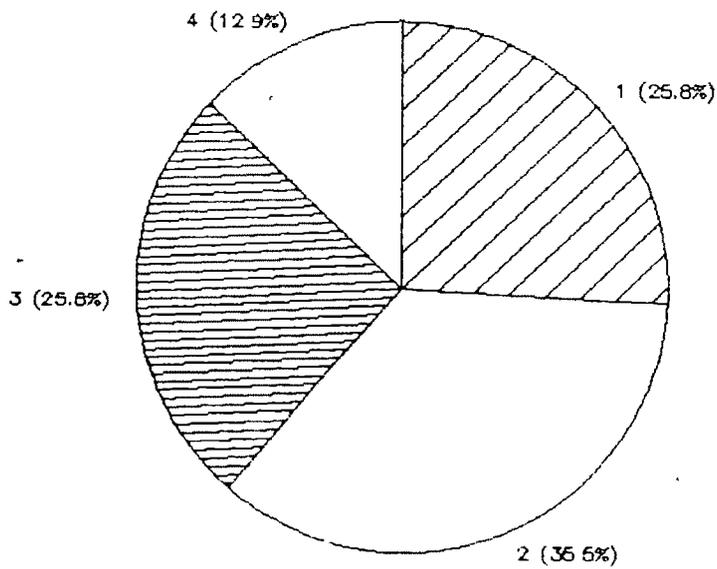
Number of papers taught by one teacher.	Teachers:	
	Frequency	Percentage
1.	8	24
2.	11	34
3.	8	24
more than 3.	4	12

The table above makes it clear that the percentage of the teachers who teach all the three papers is 24 and the 34 percent teachers have to teach two papers and only 24 percent teachers

ORIENTATION OF TEACHERS TO TEACH VOCATIONAL COURSES



WORKLOAD OF TEACHERS NUMBER OF PAPERS TAUGHT



are taking one paper. Research also noted that there are teachers who are taking other courses besides the three papers of Vocational Course and their percentage is 12.

Regarding work load of teachers with respect of number of periods of teaching per week, Board recommended a maximum of 28 periods. Periods taken by vocational teachers in terms of work load, as well as in terms of theory as well as practicals is presented in the following table.

Table No. 5.11

Table showing number of period taken in terms of total work load, periods of theory and practicals, by teachers of Vocational courses.

No. of period:	Frequency of teachers:		
	Total work load	Theory	Practicals
0-4	4	6	18 (1)
5-9	9	16 (5)	5
10-14	-	2	1
15-19	10	7 (4)	4
20-24	2	2	4
25-29	3	-	-
30-34	2	-	1

Figures in brackets in Table No 10 above depicts the number

of teachers who are teaching the number of periods shown in the column against the figure, exclusively either of theory or practicals of the Vocational course, while the remaining teachers take other periods of the vocational course besides the periods of theory or practicals shown against them.

Table No.10 shows that the work load of teachers vary from minimum of 4 periods per week to the maximum of 34 periods per week. This disparity is mainly due to full time and part time teachers of the vocational courses. The assignment of vocational courses are carried out by teachers of academic courses, in addition to their regular work load of academic teaching.

The Researcher also noted that Teachers and Principals of Vocational Courses are not given any incentive to start these courses. Regular P.G.T. staff is getting their prescribed P.G.T. Scale of Rs. 1640-2900 and part time teachers are given Rs. 400/- per month.

Problems pointed out and suggestions made by teachers, Principals and planners regarding selection of teachers for the Courses include the following :-

1. There should be a fixed criteria of qualifications for appointment of teachers;
2. Temporary staff should be made permanent;
3. Remuneration of part time teachers should be increased;
4. More staff should be appointed. Minimum requirement for a course should be at least one full time teacher assisted with two

part time expertise teachers one lab boy and one peon.

5. The present restriction on the Government servants, of not taking a part time job, should be removed especially for teaching vocational courses.

Suggestions made by Administrators and Planners:

1. Sri B.P. Singh suggested that polytechnic passed outs should be appointed to teach theory and passed-out from I.T.I. should be appointed to teach practicals of the vocational courses.

2. Mr. Veer Raghvan strongly feels that there should not be any dearth of vocational teachers because these courses are need based. One good full time teacher should be appointed and the demand of further teachers be met through appointing part time teachers. Collaboration with factories can be established and the experts from different industries be motivated to be teachers.

3. Prof. S.K. Handa said that teachers for vocational courses will be trained in Regional Colleges of Education and T.T.T.Is, for which plan and preparations are in progress.

4. Prof A.K. Misra said that teachers of vocational courses will be trained according to plan of action. NCERT conduct orientation courses/programmes for vocational teachers on request.

5. Mr. Ashok Chandra expressed the view that the task to get vocational teachers is difficult because though a mechanic can teach skill he will not be able to teach theory and therefore, we need a person who can do both. A person who knows how and why to adopt new technical innovations. To provide trained teachers

for vocational students we have two strategies : long term and short term.

(i) Long term:- A teacher has to meet many demands. He must know methodology, skills and the subject. Task of vocational teacher is more difficult than the tasks of his counter parts. At present there are not many Teacher-Training Institutes for vocational teachers. First requirement is to have a programme to train Vocational teachers, teachers should be given a pay package which is commensurate with his skills. He should be given some prestige and facilities related to his job.

(ii) Short term:- Appointing trained vocational teachers is a slow process. Existing teachers should be selected and short term training programmes should be organised for them. Teachers should be provided with the opportunities to go and visit factories and learn and develop skills.

6. According to Mrs Sudha rao, there should be two types of teachers like professional colleges. One for theory and other for practicals.

Delhi Directorate of Education has laid down a plan for recruitment of teachers and has presented their qualifications. The plan is an under:-

<u>S.No.</u>	<u>Course</u>	<u>Qualifications required</u>
1.	Basic Electrical Technology	Degree in Electrical Engineering, or Diploma in Electrical Engineering with 3 Years experience.
2.	Banking	M.Com./M.A. Economics Or B.Com with two years experience.

3. Office Management & Secretarial Practice	M.Com., or B.Com. with diploma or certificate in office Management & Secretarial Practice.
4. Stenography	B.A. with certificate course in stenography or office Management & from recognised Institute or Matriculation with a certificate course in stenography with 10 years experience.
5. Accounting & Auditing	M.Com. OR B.Com. with 2 two years experience in Accounting & Auditing.
6. Marketing & Salesmanship	M.Com. OR B.A./B.Com. with 2 years experience in the field and certificate in marketing & Salesmanship.
7. Basic Nutrition & Food Preparation	M.Sc. (Home Science) OR B.Sc. (Home Science) with Diploma in Institutional food management.
8. Dress Design & Making	B.A. with certificate in Dress Design from recognised Institute.
9. Textile & Design	Diploma in Textile Design.
10. Health Care & Beauty Culture	Diploma in Beauty Culture from recognised university.
11. Horticulture	M.Sc. (Horticulture or Agriculture) OR B.Sc. (Agriculture) with 3 years experience in Nursery Maintenance.

In the financial plan of 1986-87 of Delhi Directorate of Education, provision has been made to recruit 170 teachers of Grade I and 40 of Grade II for vocational courses. Two orientation programmes are also envisaged; One to provide orientation after recruitment for about 90 days and the second orientation programme for every teacher in summer vacation, for 15 days.

CONCLUSIONS: The above analysis shows that Teachers for Vocation-

al courses are both full time and part time. Part time teachers get a meager pay of Rs.400/- with no allowances. Staff is inadequate and therefore the existing teachers are over burdened. The existing staff has the necessary qualifications as suggested by the Directorate, but even with these qualifications, they are not competent enough to teach the Courses. Administrators and planners suggest one type of teachers for theory and another type for practicals. There is a suggestion of Teachers Training through Regional Colleges of Education. Short term and long term strategies have also been suggested to meet the immediate and future demands of teachers.

6. TYPE OF STUDENTS

According to the Report of the National working Group 1985, aim of vocational education is "to provide diversification in educational opportunities to enable the students to choose subjects and programmes of study in a wide field of knowledge and skills in keeping with their aptitudes, interests and abilities and thereby improve their competence in relevant areas and increase their employability."

In India, white color jobs are always considered higher and more prestigious. In this scheme, emphasis is on employability. It aims to prepare skilled workers and supervisors, which means working with their hands. So, students and also their parents, who generally look forward for higher and respectable jobs, can not and do not prefer taking these courses. Still, due to large scale un-employment in India, there is no dearth of students who

will like to undergo such courses'. Keeping the above in mind, the researcher has analyzed the students who offer Vocational courses, in terms of:-

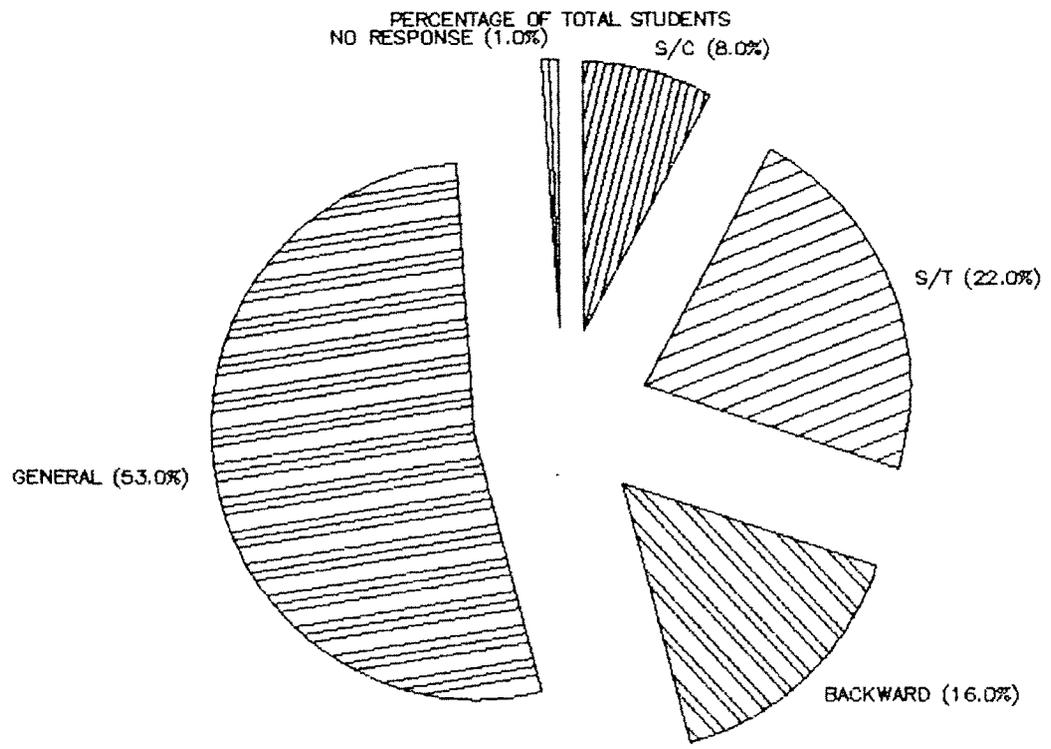
- (A) Caste;
- (B) Family income;
- (C) Parental qualifications and occupations;
- (D) Age;
- (E) Previous academic record; and
- (F) Aim for choosing the Course.

(A) **Caste of Vocational students:** For admission, there is no reservation on any basis including caste. Any desirous student, irrespective of his caste and creed, can seek admission. Table below shows that students of vocational courses are drawn from all castes.

Table No. 5.12
Distribution of students according to castes

Caste of students:	Percentage
Sheduled Castes	8
Scheduled Tribes	22
Back ward Classes	16
General	53
No response	1

CASTEWISE DISTRIBUTION OF STUDENTS



According to the aforesaid observation, majority of students belong to General castes. Still there is a good number of students belonging to scheduled castes, Scheduled tribes, and backward castes who comes to about 46 percent even without any reservation or preference. The fact that majority of students belong to the general castes contradicts the widely held belief that vocational courses are for backward castes.

Family Income

An analysis of the distribution of family income of the students is presented below :-

Table No. 5.13

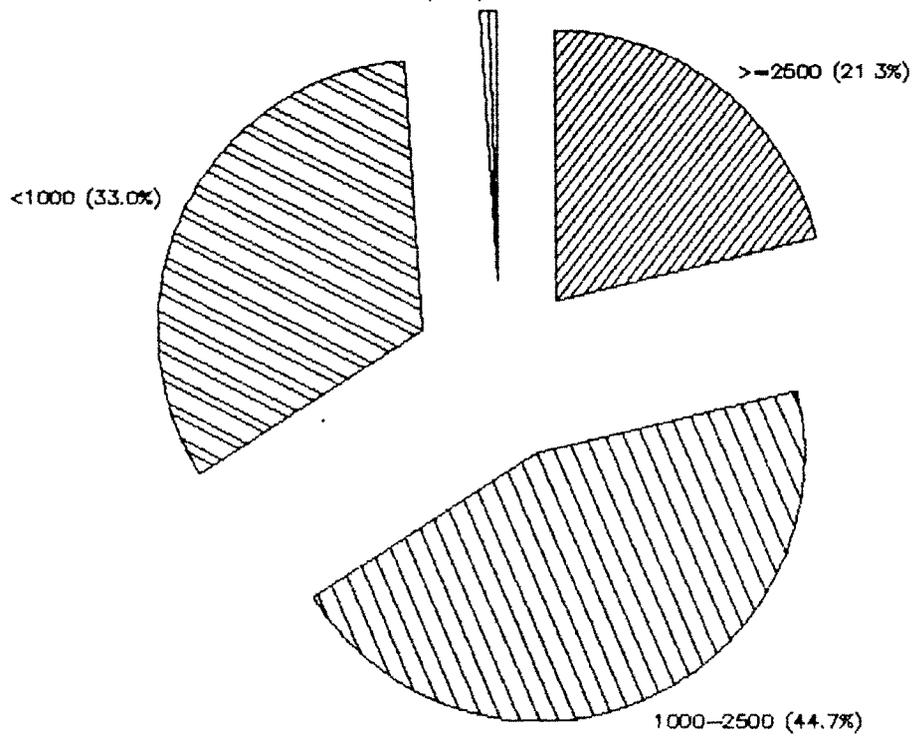
Distribution of students according to their family income.

Income:	Rs.2500 or more	1000 to 2500	1000 or less	No response.
Percentage:	20%	42%	31%	1%

From the table above, it is observed that the population is normally distributed over different income groups. It is also seen that the maximum number i.e. 42 percent of the students, come from middle level income group. This contradicts the notion that the students to vocational courses come from economically backward section of the society. Even the percentage of those students who come from financially well-off families having an income of Rs. 2500/- and more, is quite significant, around 20 percent (which is more than the ratio of their population in the

DISTRIBUTION OF FAMILY INCOME

PERCENTAGE OF TOTAL STUDENTS
NO RESPONSE (1.1%)



society).

Parents Qualification

Qualification of parents of students joining these courses is analyzed in the following table -

Table No. 5.14

Educational qualifications of Parents:

	P.G.	Graduate	H.S.	Non-formal education	Illiterate	No Respon
Father	11	31	42	11	4	1
Mother	1	11	43	20	21	4

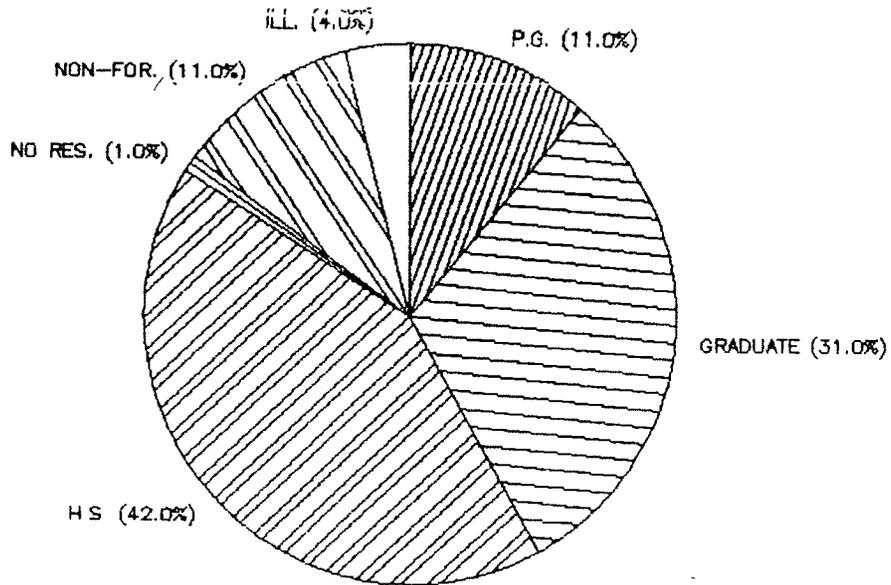
The table above makes it clear that vocational students come from educated families. Researcher found only 4 percent of the students whose parents are illiterate. It shows that even the highly educated families are not averse to vocational education.

Occupation of parents

to study the effect of occupational background of the parents the researcher studied the occupations of father and mother of the students. Analysis of their occupations is given below :-

EDUCATION QUALIFICATION OF FATHER
PERCENTAGE OF TOTAL STUDENTS

XIII



EDUCATION QUALIFICATION OF MOTHER
PERCENTAGE OF TOTAL STUDENTS

XIV

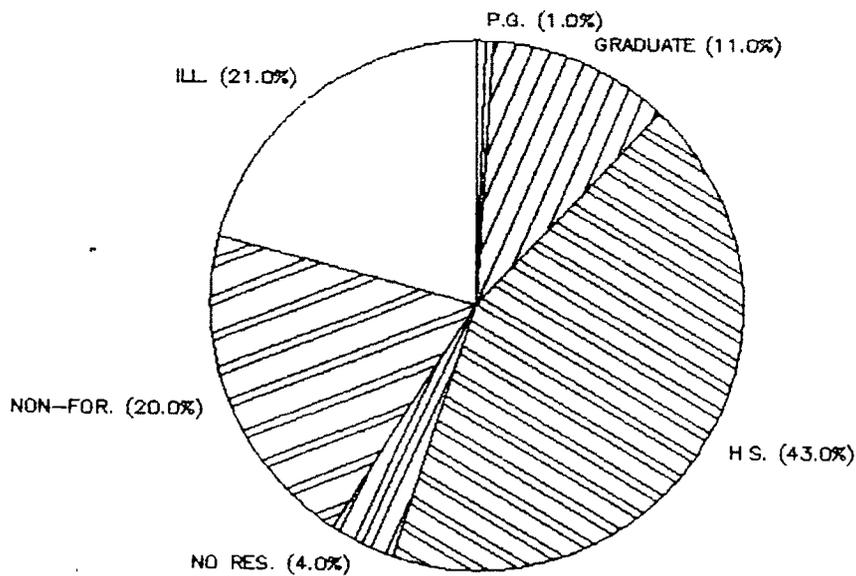


Table No 5.15

Occupation of parents of vocational students

Fathers' employment:

Self-employed	Service		NO response
	Officer	Clerk	
33%	38%	23%	6%

Mothers' Employment

Self-employed	Service	House wife	No response
8%	2%	89%	1%

This table makes it evident that even Officers send their wards for vocational courses.

Age of Students

Age factor is analyzed in the following table :-

Table No. 5.16

Age of students undergoing vocational Courses

15 Years or less	15 to 17 Years	17 Years or more	No response
2%	58%	39%	1%

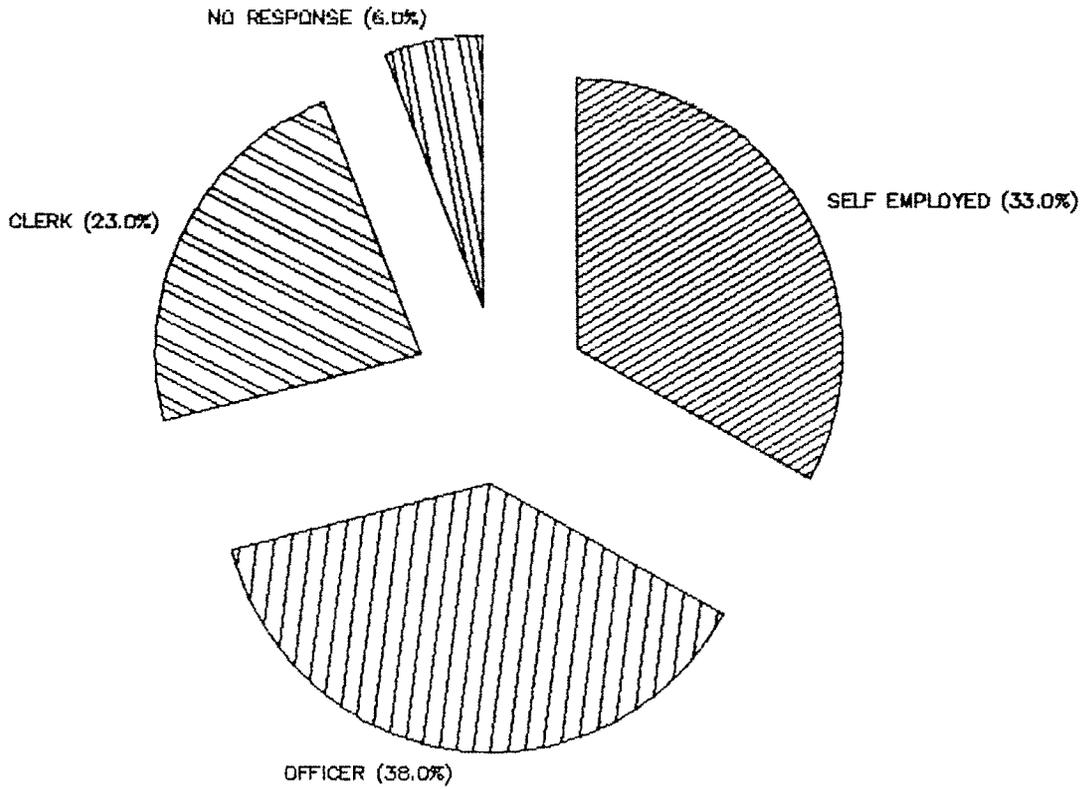
It is observed that most of the students are below 17 years of age.

Academic achievements

Students of Vocational courses were asked to provide information regarding their past academic achievements which are

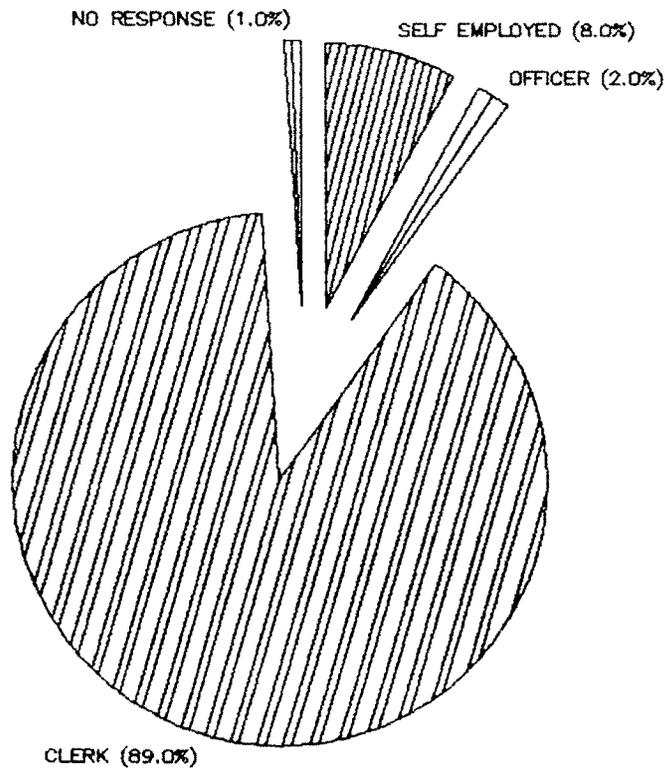
XV

OCCUPATION OF FATHER



XVI

OCCUPATION OF MOTHER



analysed in the following table :-

Table No 5.17

Academic achievement of students at the time of seeking admission to Vocational courses.

Division obtained in 10th Class Exam
(Figures in percentages)

<u>First</u>	<u>Second</u>	<u>Third</u>	<u>NO response</u>
7	54	34	7

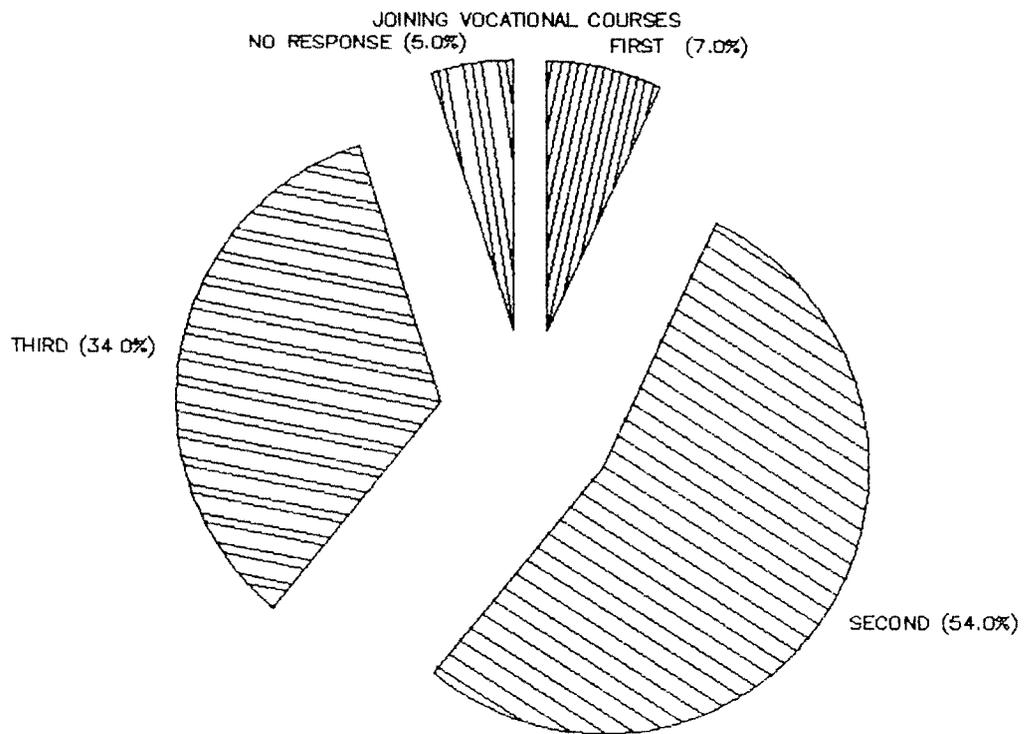
This Table shows that all level of students, seek admission to the Vocational courses. Even first divisioners are there , though generally second divisioners are in majority, around 54 percent . But during discussions with teachers, the researcher was told that only below average students opt for these course.

Table NO. 5.18

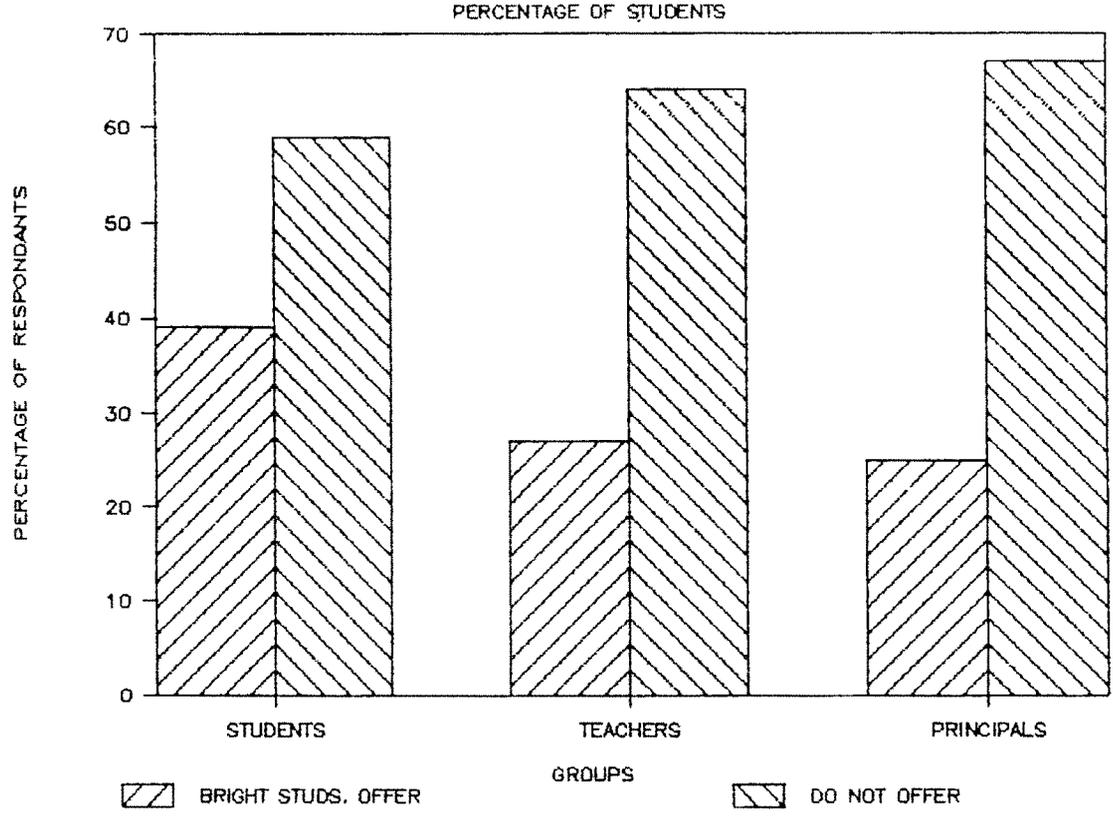
Table showing response of students, teachers, and Principals regarding intellectual ability of students of these courses:

<u>Item</u>	<u>Students</u>		<u>Teachers</u>		<u>Principals</u>	
	Yes	No	Yes	NO	Yes	No
1. Bright students offer vocational courses.	39%	59%	27%	64%	25%	67%
2. Vocational students are intellectually inferior to students of other courses.	43%	54%	33%	64%	33%	59%

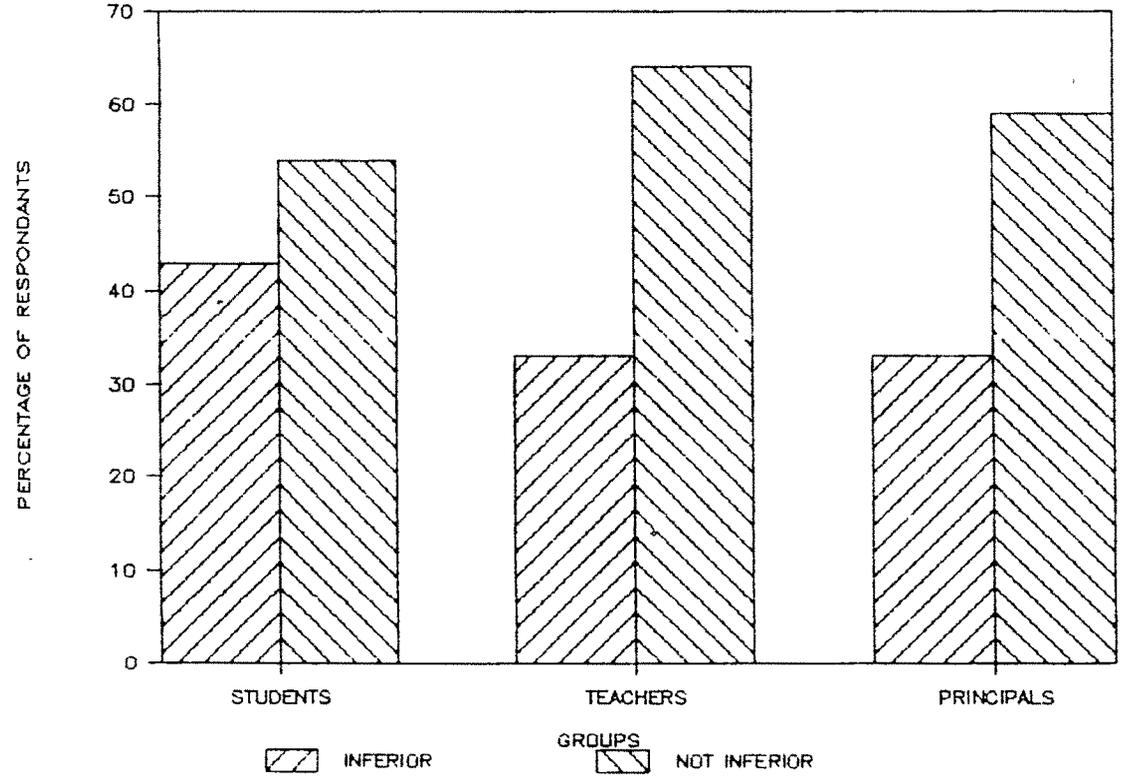
ACADEMIC STANDARD OF STUDENTS



BRIGHT STUDENTS OFFER VOCATIONAL COURSE



VOCATIONAL STUDENTS ARE INFERIOR TO STUDENTS OF OTHER COURSES



The view of students, teachers and principals, as shown in the table no.18 above, is that bright students do not opt for vocational courses but at the same time they say that the students of these courses are not intellectually inferior to academic stream students.

Aim for choosing the vocational course

To assess the involvement of the students with the vocational courses, information was collected as to the reasons for their joining these courses. Analysis of responses is indicated below:-

Table No. 5.19

Aim of students for choosing the vocational course.

Aim	Percentage
1. To get admission in polytechnic.	4%
2. Not being able to get admission in other courses.	15%
3. Liking for the course	48%
4. To get a job at early stage.	32%

This table shows that about half the students (48 percent) offered these courses because of their liking for these courses. This is followed by those students (32 percent) who want an early employment. 15% students appear to have opted for the courses under compulsion, having no other alternative.

The researcher also tried to know as to how the choice of the course was made by the student. The response to this question

is shown through the table below:

Table No. 5.20

Table showing the response of students as to who decided for them the course they are undergoing:

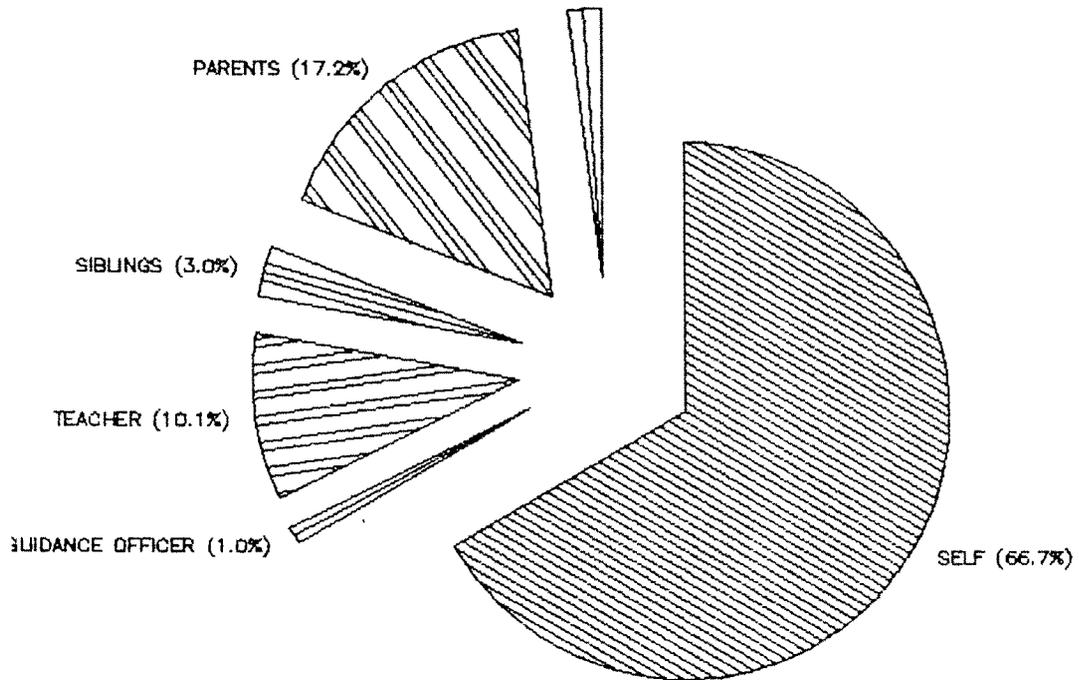
Deciding person	Percentage
1. Self	66%
2. Teachers	10%
3. parents	17%
4. Guidance Officer	1%
5. Siblings	3%
6. Friends	2%

It is evident from the table above that a large number of students i.e. 66 percent, almost two-third of the total, have opted for this course themselves, according to their own understanding of the merits of the course. The number of those who were inspired by their parents and teachers is about one fourth (27 percent).

During discussion about the type of students offering vocational courses, Prof. A.K. Misra expressed his view that there should not be any misconception about vocational courses. Any student whether he is high achiever or low achiever can join these courses. We should not force students to join vocational courses. If only low achievers are opting for these courses, there is nothing wrong because in case high achievers are admit-

INFLUENCE OF DIFFERENT GROUPS

IN CHOOSING THE COURSE
FRIENDS (2.0%)



ted to vocational courses, the needy students will be deprived. Vocational courses are for those who need them and not for those who can reject them.

CONCLUSIONS: Vocational students are from all castes, from all categories of financial and social status and intellectual standard. Majority of them belong to General castes, middle income group families and second Divisioners in 10th class. Parents of these students are generally educated and are from all types of jobs. This indicate that vocationalised Courses have potential to attract students from all the strata and classes of society. Courses are chosen by the students themselves because of their liking and need.

7. SELECTION OF COURSE

National Working Group, in its report, mentioned; "Regarding Vocational subjects, following aspects deserve consideration:-

1. Duplication of courses offered in I.T.Is. and Polytechnics level institutions should be avoided particularly in the area of Engineering and Technology.
2. Facilities for instruction and training and opportunities for employment in the region should be taken into account.
3. Laboratory facilities available in the school or those that can be procured with marginal financial inputs should be taken into account while deciding on the vocational subjects.
4. The subject chosen should have both knowledge and skill content so that teaching, evaluation and award of certificate may

have some uniformity and be a basis for evaluation and standard.

5. The Vocationalisation programme should aim at making optimum use of the institutional, industrial and organisational facilities available in the vicinity for instruction and Training.

6. The relevant sections of the community in general must be intimately involved in the formulation and implementation of the vocational courses.

To select courses after keeping all these points in mind, occupational surveys were necessary to be conducted. The researcher found that no occupational surveys were conducted in Delhi for selection of courses. In the 1986-87 plan scheme, counsellors were to be recruited and there after occupational surveys were to be conducted. This scheme was launched in Delhi in 1977. At that time as sufficient time was not available to conduct surveys, these courses were selected on the basis of "No-Objection-Certificates" issued by Employment Exchanges. Table No-21 below shows the occupations for which no-objection certificates were issued and on that basis the courses which were offered.

Table NO. 5.21

Table showing occupation for which N.O.C. were issued and the Courses offered on that basis.

Occupations	No of N.O.C. Issued	Courses offered
1. Electronics	16	
2. Electricals	40	Basic Electrical Technology.
3. Electric Communication Engineering	02	
4. Cutting & Tailoring	24	
5. Textile Designer	04	Dress Design & Making.
6. Weaver	31	
7. Weaving Master	03	
8. Food Canning & Preservation	01	
9. Catering Manager	22	Food & Nutrition.
10. Hotel Management	20	
11. Steno English	201	
12. Steno Hindi	02	Stenography
13. Typist English	373	
14. Typist Hindi	01	
15. Sales Supervisor	04	Marketing
16. Sales Asstt.	05	& Salesmanship.
17. Account Asstt.	18	Accounts & Auditing

Occupations	No of N.O.C. Issued	Courses offered
18. Accountant	04	Accounts & Auditing
19. Office Assistant	116	Office Management &
20. Manager	01	Secretarial Practice.
21. Laboratory Asstt.	13	Ophthalmic Technology

Table no. 20, above shows that the demand for certain vocations in the area can be met by the Courses started on the basis of No objection certificates issued by the Employment Exchanges.

As regards the another suggestion that the vocational courses offered at the Plus Two level should not be a duplication of courses already being taught in I.T.Is. and polytechnics, it is found that only two courses are such which are not being taught in Polytechnics and I.T.Is. These are:-

1. Banking,
2. Horticulture.

All other courses offered at plus Two level are already being taught in I.T.Is. and Polytechnics. And the two courses which are exclusively taught at plus Two stage, there appears No demand as Employment Exchange has not issued any N.O.C. for that.

Other conditions like infrastructure, employment potential, community co-operation were not fully satisfied in the selection

of courses at plus two Level.

During discussion, Sri B.P. Singh pointed out that new courses will be started after vocational surveys and surveys are possible only when staff for that purpose is made available. According to Mr. Veer Raghvan, courses should be tailored to the Jobs. Vocations will develop slowly as the work of a social worker has turned into a professional job from a voluntary function. New courses linked with different professions should be introduced. For example dealership can be a course, if a professional approach is given to such jobs. It will also enhance the prestige of the job. Bajaj and few other companies award their high performing dealers.

Mr Ashok Chandra suggested that survey of the area should be carried out before starting a vocational course . And that courses should also be framed for service sector besides technical sectors. Service sector is growing and for different type of services different kinds of capabilities and knowledge are required which can be provided by starting specialized courses for different service sectors.

In view of Dr.(Mrs) Sudha Rao, duplicity of courses should be avoided. Home science and commerce based courses which are already being taught in other institutions, should not be taught at the plus Two stage. Instead of that new courses, as per needs of the society should be started.

The need for new courses is also felt by passed out stu-

dents.

CONCLUSION: From the aforesaid discussion, it is observed that basis for starting the Courses has been the 'No objection certificate' issued by employment exchanges and such certificates have been taken as showing the need for the course. However, the need for new courses based on the different professions and skills required for them is still felt and expressed by every one from Administrators to students. In addition they are in favour of avoiding duplication of courses.

8. COURSE STRUCTURE (SYLLABUS)

Curriculum is an essential and most powerful means of education from the earliest times to the present day. It is an evolutionary and continues process which embodies in itself all the learner's meaningful experiences. Curriculum provides a system through which school tries to provide and the students gets and attains the set goals of education. Curriculum is needed for all type of courses including the vocational courses. Curriculum need to be appropriate and should be framed in a manner so that it can meet the aims and objectives of the course. Demands on the curriculum of vocational course is much higher because it has to contain general education, vocational theory, practice, appreticeship with a focus on employability. Pattern of vocational Education has been discussed and recommended by various committees. Course structure recommended in the document 'Higher Secondary Education and its Vocationalisation' (1976) is given in the table no.5.22 below. The document has recommended three

groups in the Course as shown in the Table below:-

Table NO. 5.22

Table of Curriculum recommended in the National Document for a vocational course

Group	Curriculum	Percentage of the course:
(A)	Language & General studies including social studies, economics & General Science.	25%
(B)	Science & Social Science Courses designed to understand the basis & scope of various vocations.	25%
(C)	Vocational studies of the Course with practice.	50%

Review Committee, appointed by the Government of India under the chairmanship of Dr. Malcom S. Adiseshiah, recommended a slightly different Course structure which is given below:

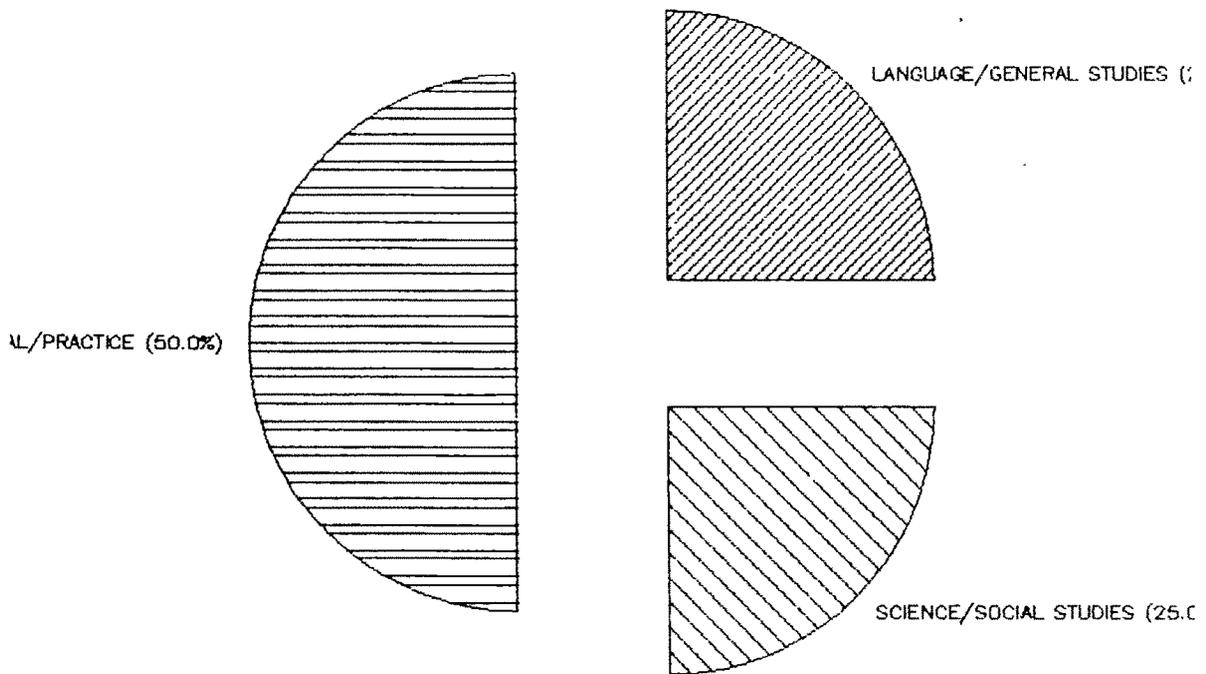
Table No. 5.23

Table showing the course structure recommended by Review Committee.

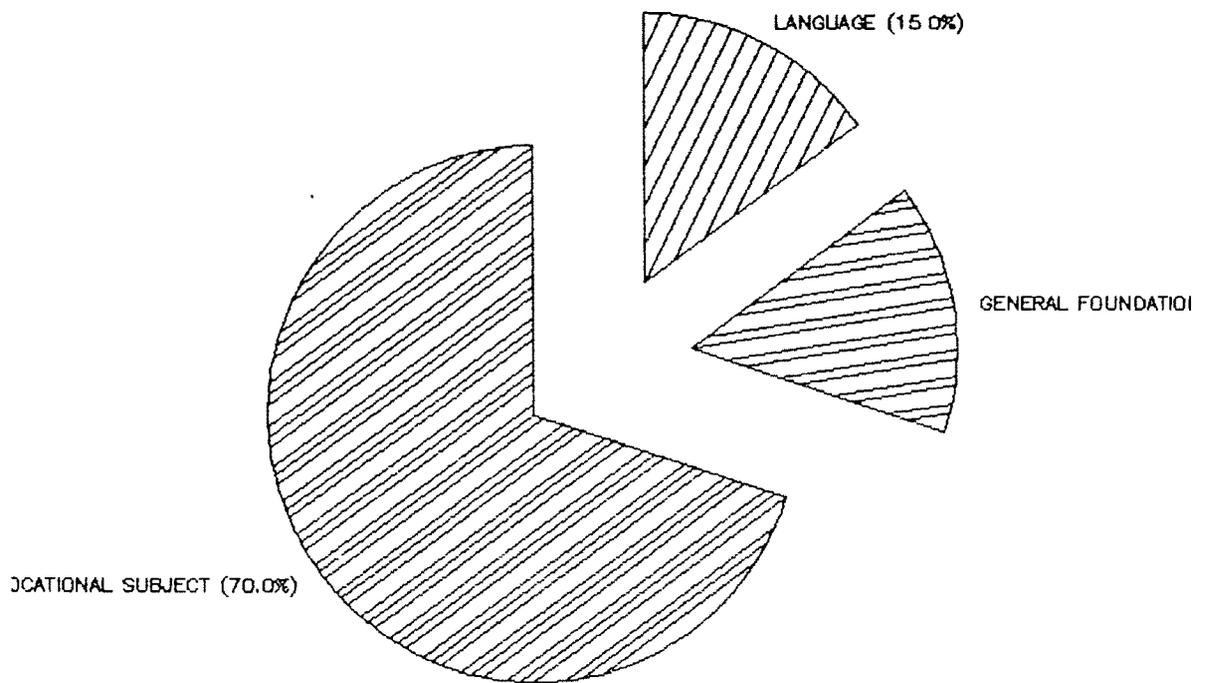
Each Course is to have three Groups according to the percentage shown in the table:

Group	Curriculum	Percentage
A	Language	15%
B	General Foundations	15%
C	Elective Vocational Subject	70%

RECOMMENDATION IN DOC. FOR VOCA. COURSE
CURRICULAM OF THE GROUP



COURSE STRUCTURE RECOMMENDED
BY REVIEW COMMITTEE



Course structure in Delhi is in accordance with the recommendations of Adishesiah Committee and the periods are allotted in almost the same proportion as is evident from the following table:

Table No. 5.24

Table showing periods allotted to different parts of the Syllabus:

Part of the Syllabus	Period per week
A. Language	10
B. General Foundation	08
C. Vocational Subject	30

It is clear from the table that the periods allotted to the parts of syllabus are according to the recommendations of the review committee.

CONCLUSION : There are two patterns suggested - one gives 70 percent weightage to the Vocational subjects and the other gives only 50 percent. The researcher, however, feels that the objective of the Vocational education is to prepare such persons who can think as well as work and therefore proper emphasis on the general foundation course is necessary and suggests the percentage in the Course structure as under :

PERIODS ALLOTTED TO DIFFERENT COURSES
PER WEEK

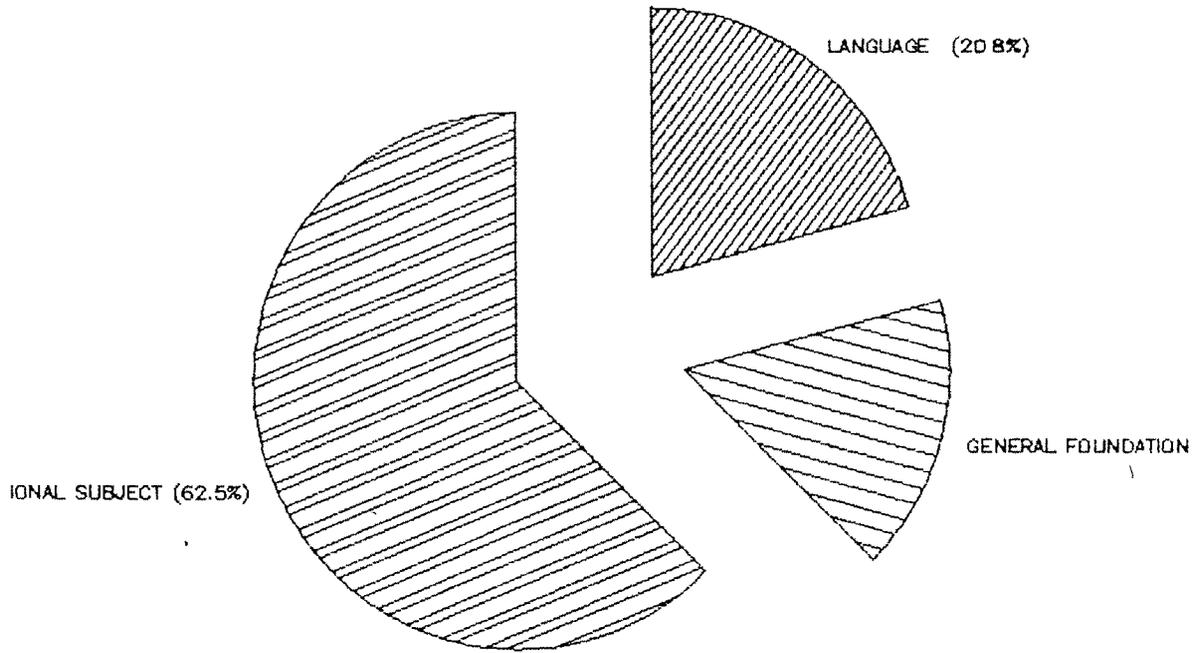


Table No. 5.25.

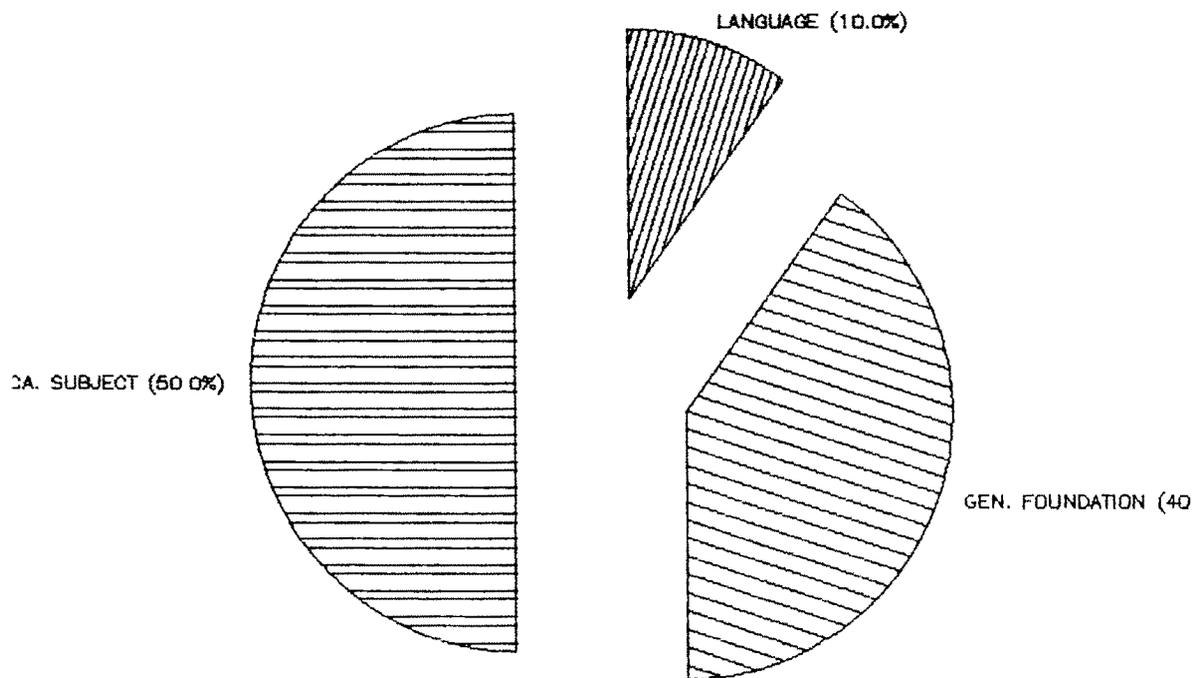
Table showing Researcher's suggestion regarding the percentage of the curriculum and the periods allotted for different parts of the Course:

Course	Percentage
A. Language	10%
B. General Foundation	40%
C. Vocational Subject	50%

Students, normally, learn three languages upto Xth standard under the three language formula implemented in the new education policy. Language part in the course may vary according to the need of the course. For example, language part of the course may be more important for a course which prepare students for public dealings such as marketing & salesmanship. But it can be of lesser importance in courses where a student has to deal with machines, instruments and technical apparatus such Basic electrical technology and thus in such courses more time can be devoted to General Foundation courses which is important to apprise a student with the theory and the background of the Vocational subject, to prepare a student to think logically. General education, thus, requires 40 percent weightage. Vocational Course, which is the main aim and objective, need to be given 50 percent weightage and time . Out of this 50 percent, 40 percent should be devoted for the practical work and 10 percent for the related theory.

RESEARCHER'S RECOMMENDATIONS

PERCENTAGE OF CURRICULAM & PERIODS



Problems faced by Teachers regarding syllabi :

Teachers of different vocationalised courses face different problems. A few of the problems noted by the researcher are enlisted below :-

1. Delhi, being a metropolitan city, attracts people from all over the world and this necessitates that students of Health Care & Beauty Culture should also be taught at least one foreign language English to enable them to converse with customers from other countries.
2. In the course of Applied Horticulture, topics which are not related to the crops not grown in the Union Territory of Delhi, such as Chwshew Nut and Zinger crops, should be eliminated from the courses.
3. Subjects like Die, Discharge Printing and Roller Printing are fast changing because of new innovations and the present day courses are not able to keep pace with them. It is very difficult for schools to change the technology and machines frequently to keep the course upto-date. So these topics should be eliminated from textile & design courses.
4. Topics like functions of post offices, telegram and telephone should be included in Commerce based courses.

Common problems told by all the teachers of vocationalised courses are :

- (a) The extent and depth of the topic to be taught is not

clear to teacher;

(b) Syllabus is over rich and is that of graduation level.

(c) Time allotted for practical is insufficient.

(d) There are no practicals in commerce based courses, which should be introduced.

(e) Practical course in Dress & Designing need to be reduced.

(F) Coursed are not related to the Job requirements.

The researcher interviewed administrators and their views on the syllabus of vocational courses are as under :-

Shri B.P. Singh was of the view that Syllabus of vocational courses is better than that of I.T.I. and Polytechnics, because I.T.I. syllabus is practical oriented and the syllabus of the polytechnics contains more theory, whereas syllabus of vocational courses have theory and practical both.

Mr. Veer Raghvan expressed that skill content in the syllabus of vocational courses need to be increased and is to be provided according to the recommendations of the National Document i.e. 70 percent. It will help in increasing the employment potential. To increase the employment chances, he also suggested one more method of carrying surveys and establishing links with employer organisations which would help later in the absorption of the Products of Vocational Schools in their industries.

Mr. Ashok Chandra told that Employers are interested in the skills more than any thing else, therefore focus should shift to

the skill development from general ability in the syllabus. For sharpening the skills during the course of study, setting up duly equipped laboratories and facilities are needed. For example, for a course in Computer, enough opportunities should be provided to a student to operate computers and understand its use in the real life situations.

CONCLUSIONS : From the discussions made above, it is observed that the pattern of syllabus, in the Union Territory of Delhi, is in accordance with the recommendations made by the Working Group Committee. It has 70 percent emphasis on Vocational Courses, 15 percent on language and 15 percent on General Foundation Course. Syllabus has been framed by the Board but details of each topic are not given and therefore there is ambiguity and difference in the teaching of the courses from school to school. Syllabus is also not linked with employability and has not been framed in accordance with the local needs. Practical aspect is missing in the commerce based courses. This aspect, according to all the Principals, Teachers and students, is necessary to be included in these courses.

9. INSTRUCTIONAL MATERIAL (TEXT BOOKS)

Instructional material is also a critical input for the any educational programme. The instructional material required for the vocational students at Plus Two stage has necessarily to be of a nature different from what is used for the students of general academic stream. Vocational instructional material must have an intensive practical approach to the course in order to develop necessary expertise and skill among students.

As we have already seen, the task of selection of courses and curriculum designing is not yet complete. Due to which availability of text books is not possible. In the absence of text books, teachers dictate notes or students are asked to consult many books. As regards to instructional material, as the situation differs from course to course, the response of students in this regard has been different. Course wise response is shown in the table No. 5.26 shown on page 137.

The table shows that Books are available for Banking and Stenography courses. But the students complain about their high costs. One book of banking costs Rs. 31.60. Book for stenography costs Rs. 12, but the student has to purchase three books in Stenography. Steno-Students have to buy one monthly magazine also which costs Rs. 5/- per copy.

For the Course of Dress & Design no Indian book is available Foreign Books relating to the Course are very costly i.e. around Rs. 400/- per book.

Students of applied Horticulture, Basic Electrical technology and textile designing face maximum difficulty regarding instructional material. Text books are not available and the available reference material is in English language while students generally have Hindi Medium. To facilitate understanding of the students, teachers have to translate the subject matter and get the same cyclostyled and distribute amongst the students.

However, to rectify the situation efforts are going on to

TABLE NO. 5.26

Statement showing response of students to Instructional materials

COURSE		ITEMS																				
		Yes		No		Yes		No		Yes		No										
DMSP	Banking Steno.	8	70	30	67	33	91	9	45	50	11	89	33	67	75	25	17	83	65	27	56	44
HC&BC	T.M.D.	17	65	35	65	81	19	48	52	38	57	21	79	85	17	50	50	17	83	84	17	85
HC&BC	D.D.&M	45	0	100	30	70	29	26	74	35	65	42	58	33	67	75	25	0	100	16	84	41
DMSP	Office Management and Secretarial Practice	5	95	26	74	71	29	29	57	43	65	33	16	84	0	100	100	0	8	92	79	21
DMSP	Banking	75	10	90	24	74	19	48	50	58	42	84	16	17	83	50	92	8	13	87	81	19
DMSP	Steno	45	35	65	91	9	81	19	91	7	70	25	89	11	100	0	100	0	75	25	75	24
DMSP	Office Management and Secretarial Practice	8	92	30	67	33	91	9	45	50	11	89	33	67	75	25	17	83	65	27	56	44
DMSP	Banking	17	65	35	65	81	19	48	52	38	57	21	79	85	17	50	50	17	83	84	17	85
DMSP	Steno	45	0	100	30	70	29	26	74	35	65	42	58	33	67	75	25	0	100	16	84	41
DMSP	Office Management and Secretarial Practice	5	95	26	74	71	29	29	57	43	65	33	16	84	0	100	100	0	8	92	79	21
DMSP	Banking	75	10	90	24	74	19	48	50	58	42	84	16	17	83	50	92	8	13	87	81	19
DMSP	Steno	45	35	65	91	9	81	19	91	7	70	25	89	11	100	0	100	0	75	25	75	24

KEY-->

DMSP-- Office Management and Secretarial Practice Hort.-- Horticulture
 HC&BC-- Health care and Beauty culture Food&Nut.-- Food and Nutrition
 T.M.D.-- Textile and Designing Goth.-- Ophthalmic
 D.D.&M-- Dress Design and Making mSales-- Marketing and sales
 B.E.T.-- Basic Electrical Technology
 Acc&Aud.-- Accounts and Auditing

formulate a definite and detailed syllabus and also to write text books. NCERT has been entrusted with the responsibility of developing model curriculum. So far, 53 model curriculii have been framed. Detailed guidelines are being given according to local needs.

CONCLUSION : The above discussion shows that at the moment instructional material is incomplete. However efforts are going to frame the same and provide it to the students. Also the reference material is not available in the medium offered by students and they have to depend upon the notes given by the teachers who, however, dictate notes in Hindi Medium. Summing up, lack of instructional material and non availability of reference material in desired medium is hampering vocational education.

10. LINKAGE

To develop vocationalisation of education as an important national scheme, linkage is very necessary. Linkage is a wide-meaning term. It means linking various management bodies at National, State and Institutional level. It also means linking all the aspects or issues connected with vocationalization with each other at various levels. It also means linking the course with the job on one hand and with higher education at University level on the other. All these types of links have been classified under the three sub heading as :-

1. Links at the Management level;
2. Links at the Institutional level;
3. Links with Employers or the Community.

1. **Management Level :** It is envisaged that various agencies at Central and State level will be made responsible for carrying out different functions like policy making, research and development, examination and certification etc. in order to implement Vocationalisation of Education. Working Group has recommended the following agencies are the ones which will take part in the successful implementation of Vocationalisation of Education.

1. National Council of Vocational Education/Joint Council of Vocational Education through the Central Institute of Vocational Education;

2. State Council of Vocational Education;

3. All India Board of Vocational Education;

4. State Board of Secondary and Higher Secondary Education;

5. District Committee of Vocational Education;

6. Central Board of School Education;

7. Central and Regional Boards of Apprenticeship Training.

8. Technical Teachers Training Institute;

9. All India Board of Technical Education Regional Committees.

10. Indian Council of Agricultural Research, Medical, Nursing, Pharmacy and other accrediting professional organisation.

11. Central Employment and Training agencies.

12. Universities and the University Grants Commissions;

13. National Board of Adult Education and Central Board of Worker's Education.

At present following agencies are involved at National and

State level to implement the scheme of Vocationalisation of Education :-

1. National Council of Educational Research and Training;
2. National Institute of Educational Planning & Administration.
3. Directorate of Education.

First two agencies are working out the guidelines for implementation. Actual implementation is done at Directorate Level. (Management of Vocationalisation has already been discussed in earlier section). Some of the agencies are non-existing. At the same time the existing agencies are working in isolation from each other as a result of which there are no linkages between them.

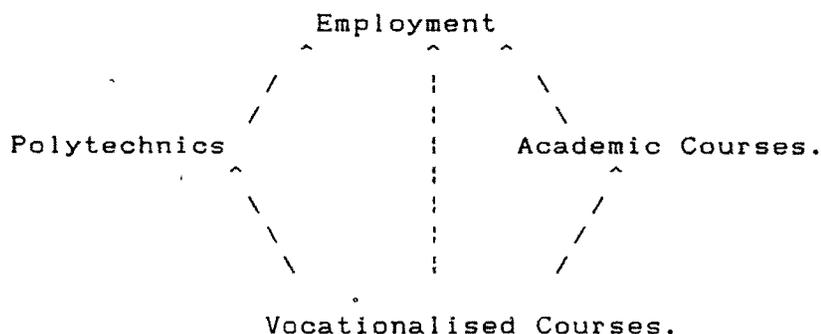
To improve the linkage at Management level, the recommendations made in the National Document are as under :- "Ministry of Human Resources and Development" will take steps to prepare a guideline document indicating the nature and functions of linkage between policy making bodies (JCVE, SCVE, Distt. Co-ordination Committee) research and development organisations in education and training (NCERT, CIVE, RCES, I.T.Is, SCERT, SIVE, District Composite Training Centers). The Ministry of Human Resource Development, the Board of Apprenticeship training, examination and certification bodies (NIEVE, NBAE, CBSE, State Board of Examinations).

Linkage of Institutions :- Education should not have a blind end. Vocational courses, which are termed as terminal, imply that they are not mainly meant to be preparatory for further education. But they also do not mean closure of avenue for further education opportunities. One who has gone through any of the

vocational courses may opt for further education in the same vocational area or opt for some other stream through a bridge course. To achieve this aim, according to the working group report, one of following conditions should be satisfied :-

1. The candidate has opportunities for further training in skill for a year or more to prepare themselves for specific area of employment.
2. There are programmes of further education that the candidate can enter to qualify for a diploma or any other recognised qualification in the chosen occupational area.
3. The candidate possesses necessary knowledge and skill training, on the basis of their education and training in Plus Two Stage and they can usefully employ themselves either on their own or as a part of the existing productive system in their environment.

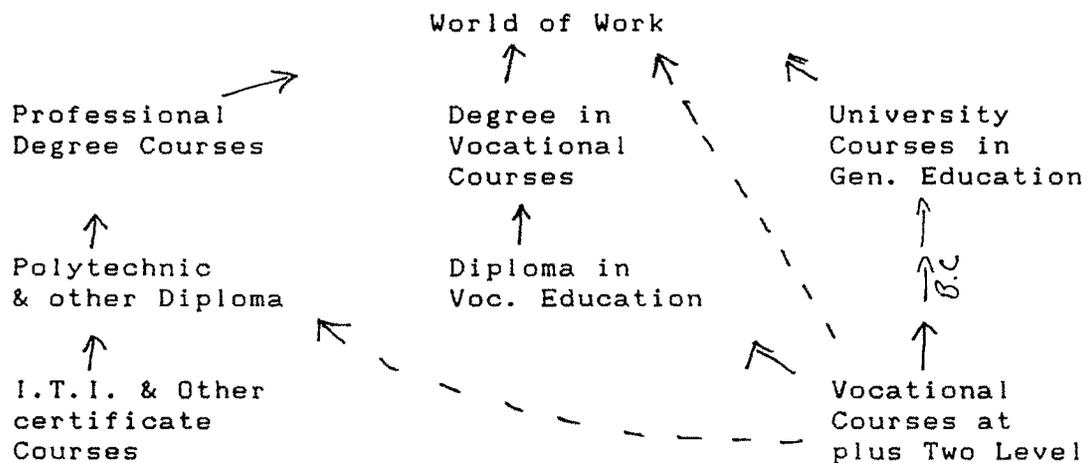
These three conditions are partly satisfied in the Union Territory of Delhi. Students have opportunities to pursue further related courses and to enter in the world of work but they do not have further training opportunities in specific areas. Mobility of Vocational Students can be perceived in the following manner:-



On the basis of data of passed out students, it is observed that students of Vocational Courses are pursuing higher academic

courses except for the students of Basic Electrical Technology. Students of this course get admission in the second year of Polytechnics. For rest of the courses, vertical mobility in the related occupations is not possible. Detailed analysis of passed out students is presented under the Heading 'Employment'.

Bridge Courses play an important role in vocationalisation. Vocational Courses are termed terminal but they do not imply a dead end. They equip a person with employable skills and at the same time avenues further study remain open through bridge courses. Therefore for bridge courses plan suggested by the Working Group is as under :-



According to this programme, Vocational students can join existing polytechnic courses or new diploma courses which are to be designed. After completion of polytechnic courses, students may join professional degree courses in Engineering or others field. After diploma in vocational education, direct entry in Degree Course in vocational stream is also envisaged. Students of few vocational courses (art or commerce) can join University courses directly but for science based university courses, they

are required to complete Bridge Courses.

But the Bridge courses are still on the drawing board. The researcher found that No Bridge Course has been formulated. As a result, students of Ophthalmic Technique were denied admission in B.Sc. Courses in Delhi University. These students could not get a job either as there was no link of the Course with the Employment agency.

During the interview, Shri B.P. Singh said that Bridge Courses could not be formulated so far because Directorate of Education is only concerned upto 12th class of Education and University are concerned with higher education and as such Bridge Courses are out of jurisdiction of both the agencies . Therefore he suggested that a separate body should be set up to formulate Bridge Courses in consultation with Universities. This body should also be entrusted with the implementation of the Bridge Courses.

Mr. Ashok Chandra felt that avenues of higher education should not be closed for vocational students. Vertical mobility must be provided to provide choice to the students . Mrs. Sudha Rao expressed the view that NCERT should be entrusted with the responsibility of formulation of Bridge Courses.

Linkage with Employer & Community : Vocational Courses are terminal i.e. students, through the courses, should acquire enough practical skills to enter the world of work. Emphasis is given on practical training so that link should be established with the community to impart training and with industries for apprenticeship and absorption.

It was suggested in the National Implementation Document that JCVE will evolve scheme to involve the public/private sector industry in vocational education through appropriate incentives/rewards. J.C.V.E. would also arrange to bring about appropriate legislation to ensure their contribution.

At present, in Delhi, efforts are being made to involve the community in the teaching of vocational courses. Students of ophthalmic technique courses are taken to A.I.I.M.S. Delhi for practical work and students of textile and design courses go to I.I.T. Delhi. Besides this, efforts are being made to seek co-operation of Banks, Beauty parlors and Industries like Maruti Udyog Pvt. Ltd. etc. for teaching related subjects. Some experts are also called to deliver guest lectures on Specialised topics. General Insurance Corporation in 1988 and Life Insurance Corporation in 1989 agreed to co-operate in the teaching of Insurance courses at the Plus Two stage. They will provide apprenticeship training also, after completion of the course.

Table No 5.27.

Table showing the response of beneficiaries on Community Co-operation.

Items	Students		Teachers		Principals	
	Yes	NO	Yes	No	Yes	No
1. Field trips are arranged:	22	77	24	76	50	50
2. Guest Lectures are arranged:	21	78	30	64	42	50

It is observed from the table that field trips and guest lectures are rarity for vocational courses. The researcher further probed into and analyzed the possible reasons for this. These are presented in the following table :-

Table No. 5.28.

Table showing reasons for not arranging field trips:

Item: Field trips can not be arranged/organised because of:

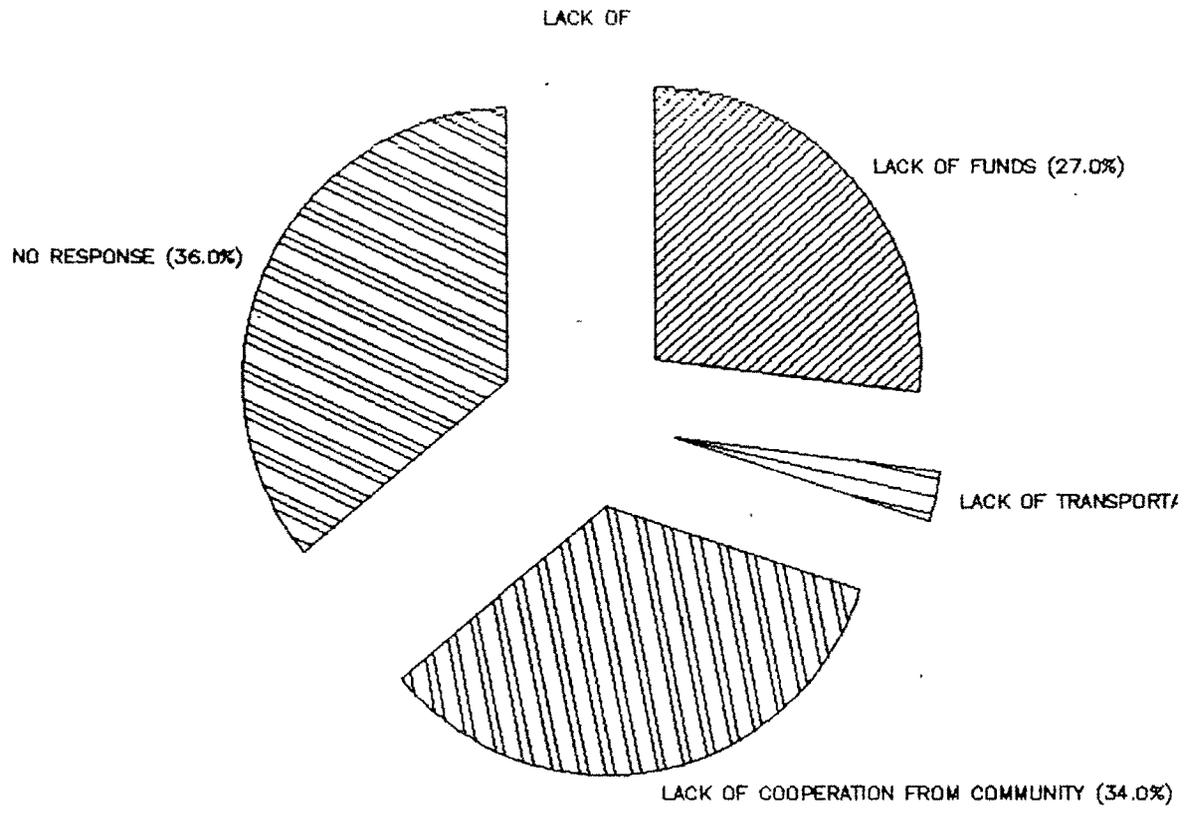
	Response of Teachers : Principals	
1. Lack of funds:	27	33
2. Lack transportation:	03	17
3. Lack of co-operation from Community:	34	16
No Response:	36	23

Teachers feel that due to lack of co-operation from the community, they are not able to take the students to actual work situations. They expressed the view that people are not interested in wasting (as they say) their time on Novices and spoil their machines through inexperienced handling. According to them the Directorate should make arrangement for practical work at real work situations.

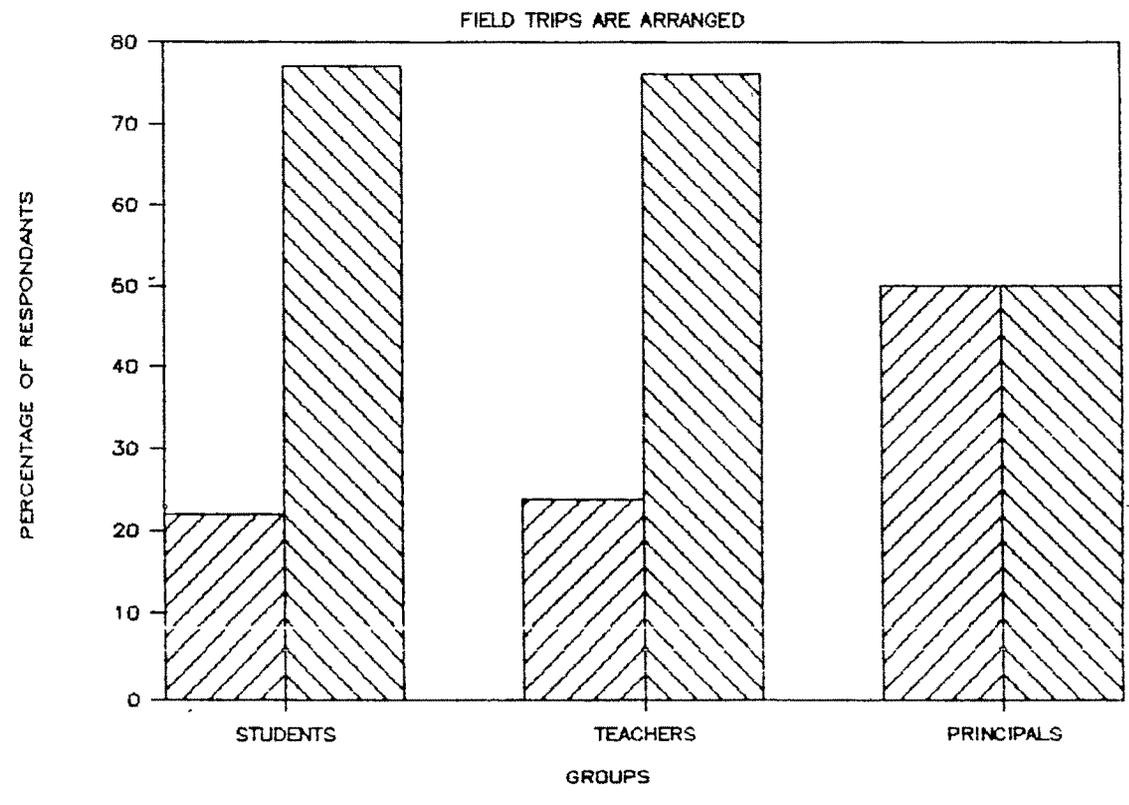
11. Apprenticeship Training :

Bringing the Vocational stream at Plus Two level under the

REASONS FOR NOT ARRANGING FIELD TRIPS



RESPONSE ON COMMUNITY COOPERATION



Umbrella of apprenticeship scheme is a crucial requirement. It is suggested that JCVE should take necessary steps to get the Apprenticeship Act amended to provide 70 percent of the higher Secondary Vocational Stream pass outs to undergo paid apprenticeship in appropriate industries. The implementation will be carried out by Regional Boards of Apprenticeship Training in collaboration with State Departments of Vocational Education.

Board of Apprenticeship training. Government of India has launched a training programme entitled 'Special Vocationalised Education Training Scheme (SVETS).

In Delhi, Some students are taken for Apprenticeship training for six months . However steps are being taken to cover more students in future. The students undergoing training are given a stipend of Rs. 200/- per month.

CONCLUSION : It is evident from the above discussion that at present there is no link established between the different management bodies. Some of them are not functional and the ones which are functional, work in isolation to each other and do not co-operate with other management bodies. At institutional level, linkage is insufficient. Students can go for higher studies to polytechnics only in those subjects and courses which are common to vocational courses. No new course or Bridge courses for vertical mobility have been formulated so far. Yet some linkage with community and industries is being established and a beginning has been made in this sphere. Some institutions like AIIMS, I.I.T. Delhi, G.I.C., L.I.C., Banks etc. are coming forward to co-operate in imparting instructions. More co-operation is being sought

from local industries including small industries like Beauty parlors, Confectionary shops, farm houses etc. A few students are getting the opportunity of Apprenticeship training with a stipend of Rs. 200/- P.M. Such avenues may be increased in future.

11. ADMISSION & GUIDANCE

Quality of product greatly depends on the raw materials used. In the same manner, success of the scheme of vocationalisation of education also depends on the quality of students admitted to the courses. To be successful in a particular occupation, it is necessary that a person has requisite aptitude and interest. Just like a square can not fit in a round hole, a shy and reserved person can not fit into sales' occupation. So, it is necessary that the students should be admitted to different courses in accordance with their aptitudes, habits and the abilities required for that occupation. In this context, Guidance services become vital aspect of vocationalisation. Researcher has analysed the response of students on the different items regarding admission and guidance facilities available in schools. in the following table :-

Table No. 5.29

Table showing response regarding Guidance Facility:

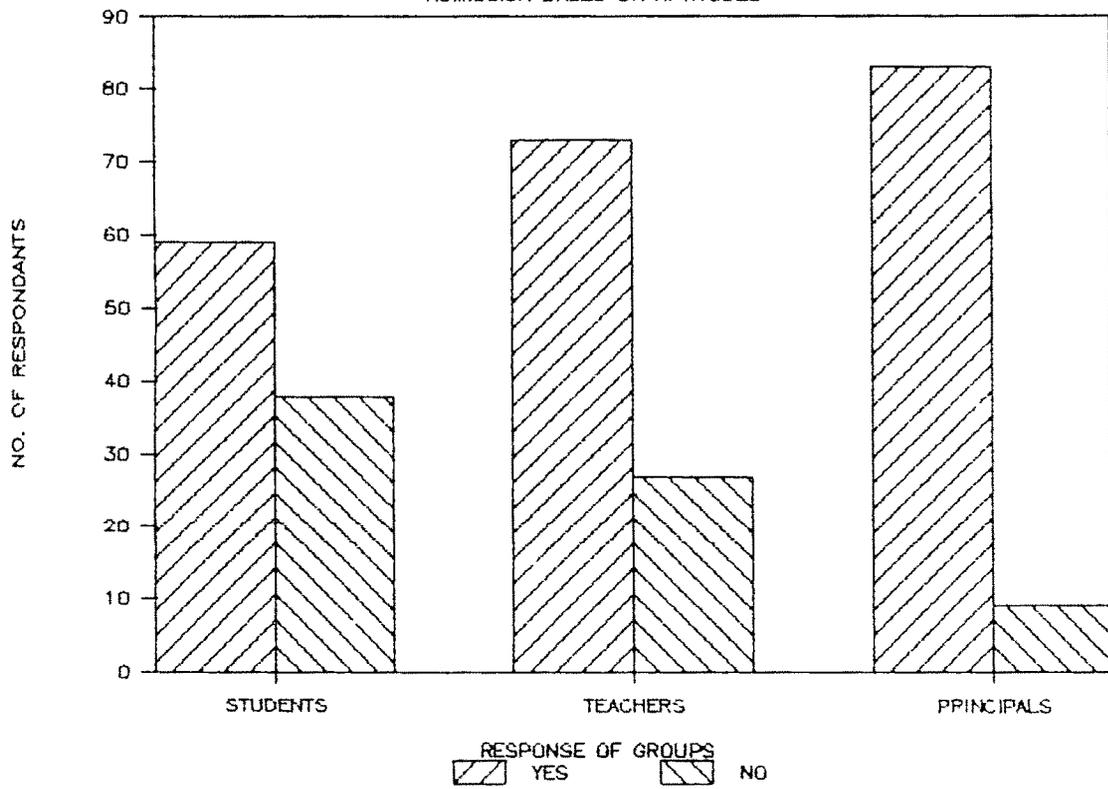
Item:	Students		Teachers		Principals	
	Yes	No	Yes	No	Yes	No
1. Students are given guidance at the time of admission.	58	40	74	21	100	-
2. Students are given admission according to their aptitude.	59	38	73	27	83	09
3. Choice of student is considered at the time of admission.	52	46	76	24	100	-

The table above indicates that students opt for vocational courses according to their own choice. However the researcher noted that there was no criteria or any psychological tests used to judge the ability or aptitude of students for a particular vocational course. Although admissions to vocational courses are supposed to be given on merit basis and for that seats are advertised in news papers. But there is no rush for admissions to these courses. Therefore there is no demand for reservation of seats in these courses. Generally, those students who do not fare well in academic subjects opt for Vocational courses.

During discussions, Shri B.P. Singh disclosed that though at present there is no fixed criteria for admissions in vocational courses, for future, a criteria is being planned which shall be on the following lines :-

ADMISSION AND GUIDANCE FACILITIES

ADMISSION BASED ON APTITUDES



CHOICE OF STUDENT CONSIDERED

AT THE TIME OF ADMISSION

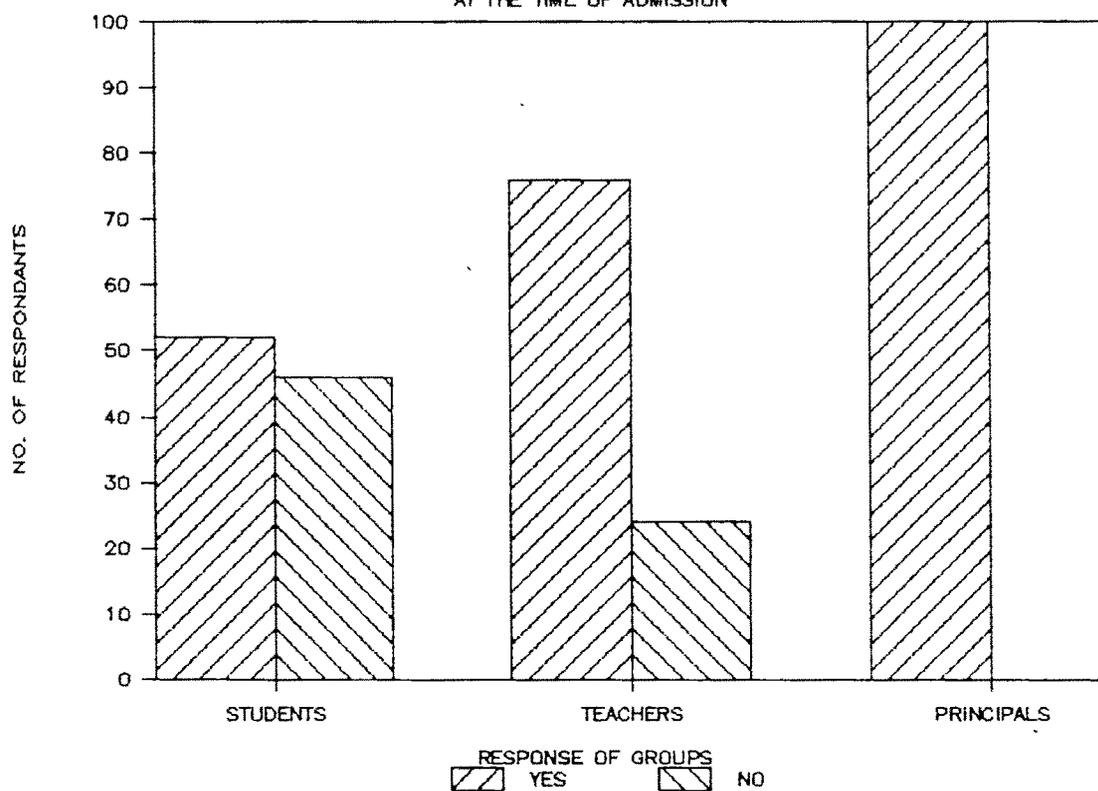


Table 5.30

Table showing proposed criteria for admission

1.Engineering based courses like Electroic technology, Structural fabrication.	1.A minimum of 40% marks in the Secondary Exam, with maths, science and Language preferably subjects like electric gadgets, electronics, etc. or some technical based subjects as S.U.P.W. in their secondary courses.
2.Horticulture	2.40% marks with Science and Language preference to be given to those having crop production or gardening as S.U.P.W..
3.Basic Nutrition & food preparation	3.40% marks with Sciecnce and Language preference to those having food preparatin as S.U.P.W..
4.Dress Design & Making	4.Students must have passed in social studies and Language and should have offered knitting & embroidery as S.U.P.W. Subjects.
5.Health Care & Beauty Culture	5.Students should have passed in all subjects in secondary school examination.
6.Ophthalmic Technique	6.40% with science ,maths and language .
7.Textlite & Design	7.40% in Language and pass in Science . Preference to those who had commercial art/ Batic and Die block printing as their S.U.P.W. work.
8.Office management & Sectt. Practice/ Ste-nography	8.Secondary pass with 40% in Language .
9. Auditing & Accounting/Banking	9.40% with mahs, Social Studies and Language .
10.Marketing & Salesmanship	10. 40% with maths and Language.

The Criteria for admission as planned for future (of Shri B.P. Singh) has both merits and demerits . The criteria for admission takes into consideration the subjects of that particular Vocational course and related S.U.P.W. activities. The minimum qualifying percentage of marks required for admission is quite low so that more students are benefited. However students' aptitude and interests are not kept in mind and there is no arrangement for psychological testing .

During discussions with teachers, it was understood that the teachers themselves collect and disseminate information about career prospects . No follow up study of passed-out students is done either at institutional level or even at Directorate level. Students are confused about employment prospects and expressed their desire to have some career Counselling. Government aided schools do not have Guidance staff. Government schools, however, have Guidance cells but in quite a few schools they were not active. One Guidance officer expressed his inability to collect information regarding employment opportunities since these courses are new and there is no fixed policy and there is no printed literature either.

CONCLUSION : It is evident from the discussions that the Guidance services are not available to the students of vocationalised Courses either at the time of their admissions or at the time of completion of the courses. Students get admission on the basis of marks obtained by them in their Xth class examinations. In this criteria also there is also no provision for the aptitude and interest of students. There is no placement help after successful

completion of studies.

12. EMPLOYMENT

From the beginning, the focus of this scheme is on employment. "The aim of vocational education is to provide diversification of educational opportunities to enable the students to choose subjects and programmes of study in a wide field of knowledge and skills in keeping with their aptitudes, interests and abilities and thereby improve their competence in relevant areas and increase their employability".

Each aspect of this scheme centered around employment, like selection of courses, syllabus, schools or occupational surveys.

To facilitate employability of the product of this scheme, Implementation Document says. "MHRD will take steps to change recruitment rules for selection in Government departments at Central and State Levels, private and public sectors to give weightage to vocational stream pass outs in posts, appropriate to their vocations."

Availability of employment opportunities as perceived by students, teachers and principals is given in the following table:—

Table No.5.31

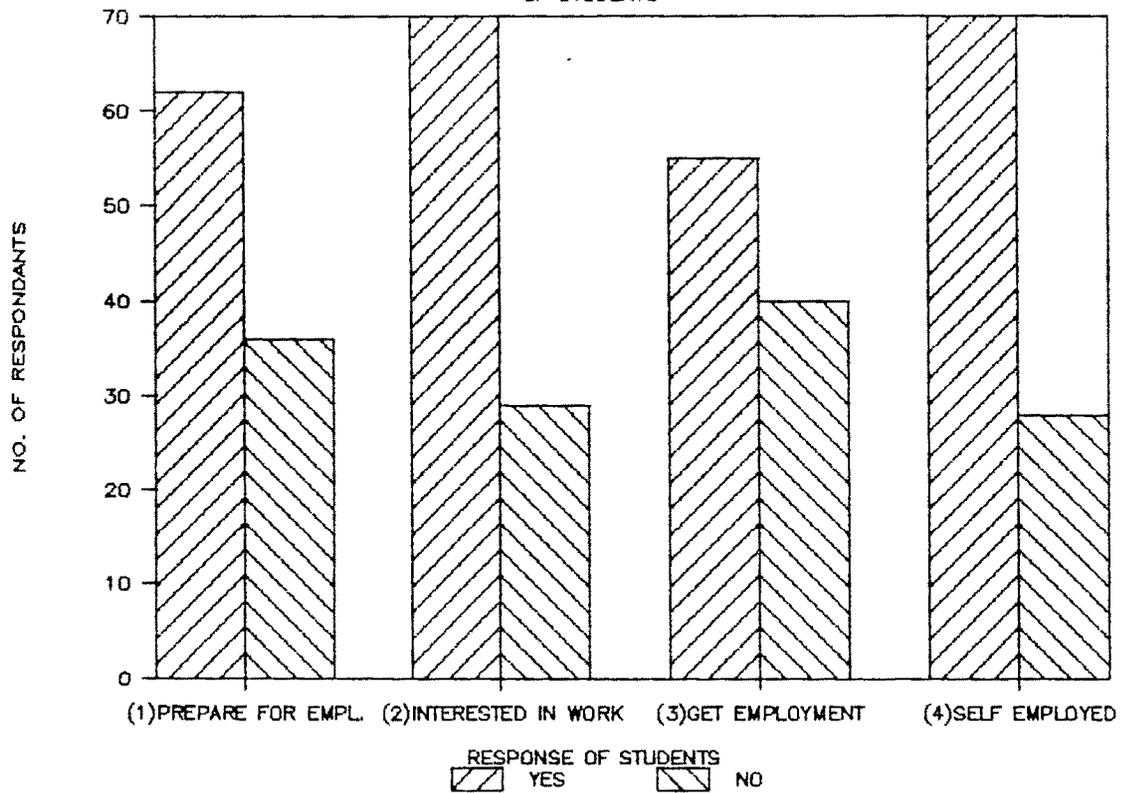
Table showing the response of students, teachers & principals on availability of employment

Item	Students		Teachers		Principals	
	Yes	No	Yes	No	Yes	No
1. Vocational courses prepare students for employment in our school.	62	36	85	15	92	8
2. Vocational courses are opeted by those students who are interested to enter in the world of work.	70	29	76	24	92	8
3. Most of the students get employment after completion of their vocational courses.	55	40	24	70	42	58
4. Students are self-employed after vocational studies.	70	28	30	64	42	50

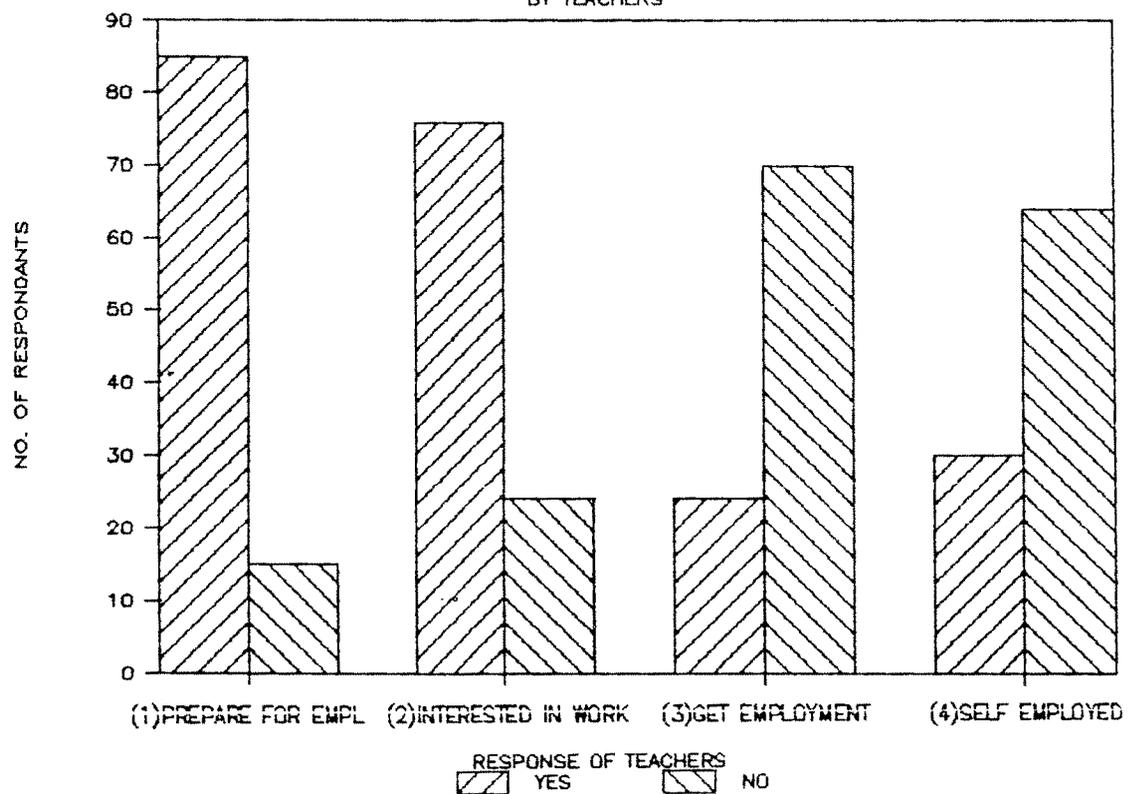
Above table indicates that while the principals, the students and the teachers all agree that vocational courses are employment oriented they do not feel that the students are actually employed after the course.

To assess the real situation, the researcher conducted follow-up study of vocational passout students. The detailed analysis of the study is as follows :

PERCEPTION OF EMPLOYMENT OPPORTUNITIES OF STUDENTS



PERCEPTION OF EMPLOYMENT OPPORTUNITIES BY TEACHERS



PERCEPTION OF EMPLOYMENT OPPORTUNITIES

BY PRINCIPALS

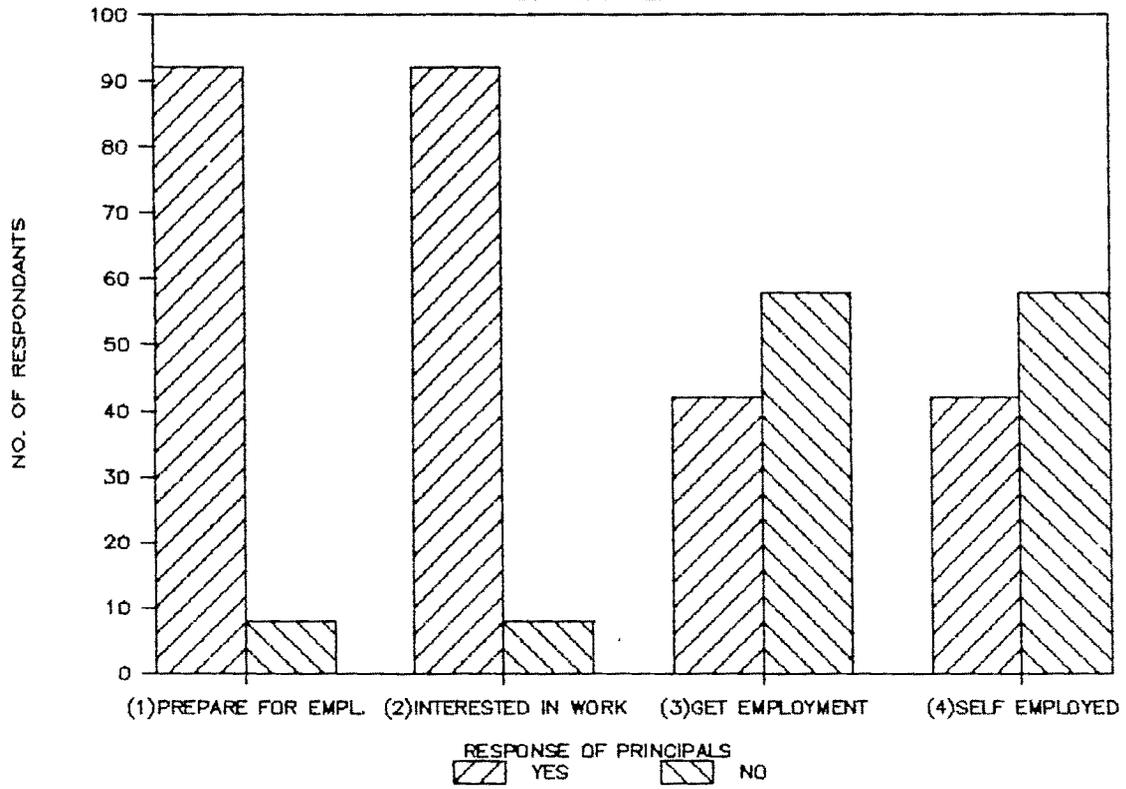


Table No. 5.32

Table below indicates names of the courses pursued by passed out students

S.No.	Courses	No. of Students
1.	Textile & Design	11
2.	Basic Electric Technology	4
3.	Health care & Beauty Culture	7
4.	Marketing & Salesmanship	2
5.	Office Management & Secretarial Practice	12
6.	Stenography	15
7.	Accountancy & Auditing	3

The respondents were passed out students from different courses. Eleven students had studied textile & designing. Four students had passed vocational course of Basic Electrical technology. Seven Students were passed out of Health Care and Beauty Culture course. Two students were of Marketing & salesmanship course. Twelve students had studied Office Management and Secretarial Practice vocational course. Maximum number of students (15) of Stenography had send their replies whereas only 3 students of Accountancy & Auditing response to the questionnaire. Although one more course was offered in 1984 i.e. Ophthalmic Techniques, no student of this course was traceable. The researcher probed further to know their present activity. Analysis of the status of passed out students after vocational courses is presened in the

following table.

Table No. 5.33

Table presents the position of passed out students.

Position	Number	%
Student	35	65
Employed	10	18
Self-Employed	2	4
Unemployed	7	1

65 percent respondent reported themselves as student. 18 percent respondents were employed whereas 4 percent were self-employed and 13 percent were unemployed. Respondants of students category were asked to specify the course pursued by them after completing plus two stage. Analysis of their response is indicated below:

Table 5.34

Students pursuing higher education.

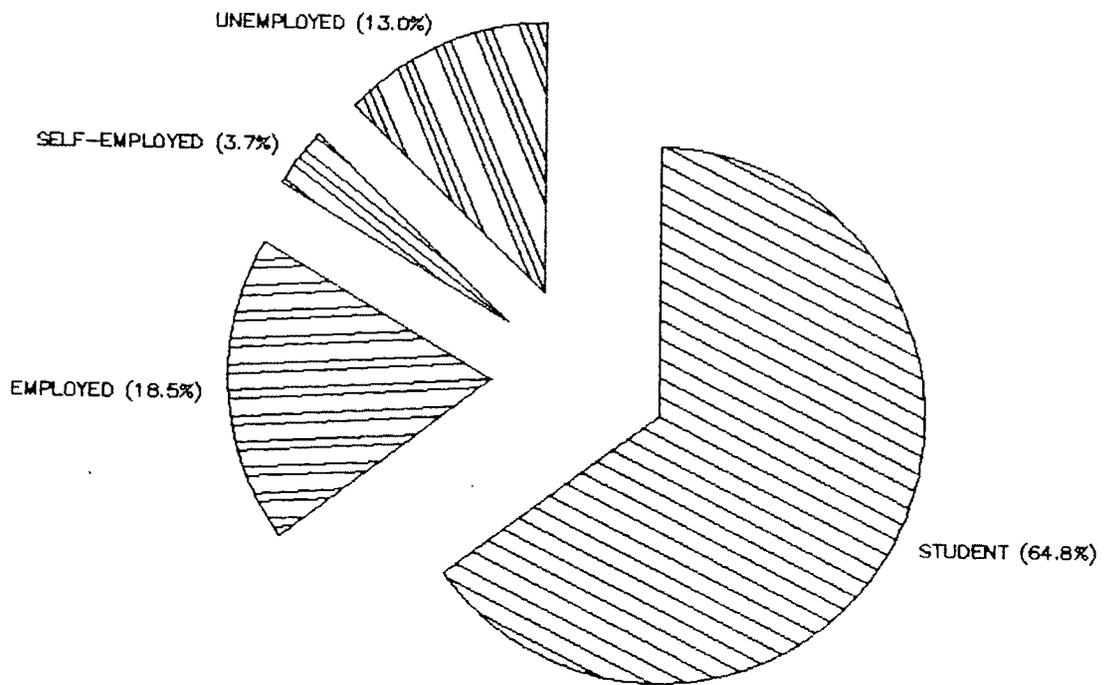
Academic	Professional	Part time
74%	20%	6%

The grassroot analysis is presented below of each category:

(1) **Students** : 64 percent students were found pursuing their education. Out of these, 74 percent respondent are in academic line.

POSITION OF PASSED OUT STUDENTS

PRESENT OCCUPATION



They are studying B.A., B.Com., M.Com. from various colleges. These colleges include Arbindo College, Malviya Nagar; Vivekananda Women's College; S.P.M. College; Dayal Singh College; Jesus & Mary College; Miranda House; Indraprastha College; G.D. Salwan College; Daulat Ram College; Deshbandu College; Lajpat Rai P.G. College; Kalindi College.

Besides academic courses, 20 percent students reported themselves pursuing related professional courses at various institutes. Details are presented in the following table.

Table No. 5.35

Table showing the courses offered at various professional Colleges.

Institute	Courses
1. International Polytechnic for women, New Delhi-49	Textile & Design
2. Indian Training Centre, Jeel Road	Electrician
3. Women's Polytechnic, Maharani Bagh	Commercial Art
4. Pusa Polytechnic	Electronics

6 percent respondents are part-time students or pursuing their education through correspondence courses.

(2) **Employed Students** : 10 respondents were employed at various institution at different posts. The period of waiting for jobs varied from six months to two years. 4 respondents got jobs in less than 6 months' time after completion of their vocational

course. One student got it after 2 Years and 5 respondents did not specify their waiting period . Out of 10 employed person, 1 is holding a part-time job, 7 are full time employed and 2 respondents did not specify the nature of their job.

One Student is employed since 1984, 5 are employed since 1985 and 3 respondents got their current job in 1986. Few respondents have changed jobs in between. The names and addresses of some of the employing agencies are given below :

- (a) Milestones Advertising Consultants, A-87
Malviya Nagar, New Delhi-17
- (b) Veejay Traders, 314, G.A.A.M., Kashmere Gate
- (c) A.S.I. Building Janpath, New Delhi
- (d) Bellina Beauty Parlour, E.A. -409, Q-8 Area, Rajouri Garden
- (e) Metro Electronic B-216, Naraina Industrial Area, New Delhi
- (f) M/s. Goyal Beauty Parlour, B-9, Shop No. 2, Rana Pratap Bagh
New Delhi-5
- (g) Society of Indian Computer Users, 1738/55, Naiwala Karol
Bagh, New Delhi-5
- (h) Advance Level Telecom Training Centre, Ghaziabad
- (i) Kirloskar Brothers Ltd. 5. Jeevan Tara Bldg.,
Parliament Street, New Delhi
- (j) Atani House, 132, Sadar Bazar, Main Road
- (k) Elizabeth Hi-Fashion, E-162, Greater Kailash-II,
New Delhi-48.

All the employed respondents did not get these jobs after completing vocational courses of plus two level. 8 students got jobs related to their course, whereas 2 students did another course to get the job. The employed students are working at var-

ious designations. These are :-

- (a) Stenographer
- (b) Clerk
- (c) Beautician
- (d) P.A. to Marketing Manager
- (e) Fashion Designer

Self Employed : Out of 54 respondents, only 2 are self-employed. One of them passed Health Care & Beauty Culture course of the vocational stream. After that, she joined YWCA for Medical Laboratory Technology course. After completing this course with the help of her Guardian, she started a clinic for routine medical tests. Another respondent passed Marketing & Salesmanship course. He is taking care of his "family's business".

UNEMPLOYED : Out of 54 respondents, 44 have marked themselves as unemployed-irrespective of their other assignments. Out of these 44, 7 are not doing anything, while the rest are pursuing their education. 21 Students have registered their names with employment exchanges. 9 got registered their names in the year 1984, 8 in 1985 and three in the year 1986. The students who have not got themselves registered, feel that the registration is of no use.

In response to the open ended items, many suggestions/impressions regarding the utility of vocational courses were gathered. Some of them are :-

1. Job of a steno is available on part time as well as full time basis, and one can get the job easily.

2. Courses provide good opportunities for starting a career.
3. There being a reservation of 10 percent seats in Polytechnics for those who pass out of vocational courses, it helps Vocational students to get higher education in the trade through Polytechnics.
4. Courses are useful to becoming technicians.
5. These courses enable a person to work at home and/or in service. And as such, these are useful for personal as well as public life.
6. It saves time because one learns the trade side by side with general education at school.

Views against the utility of these courses included,

1. Courses are of no use there being no job guarantee after the completion of course.
2. Suitable jobs with a satisfactory salary are not available.
3. For marketing and salesmanship, employers prefer girls instead of pass out male candidates, even if the girls had not undergone the relevant course.
4. The Office Management & Secretarial Practice Courses are of little use in the absence of practical training.
5. One cannot get admission to B.Com. classes even after passing out Commerce based vocational courses.
6. Vocational courses are not useful at present, they may become useful in future.

Suggestions :

Suggestions given by passed out students include :

- (1) Practical training should be increased in schools.
- (2) Govt. should provide jobs after completion of the courses. Apprenticeship alone is not sufficient.
- (3) After completion of the course, students should be absorbed automatically. For self-employment, loans should be provided.
- (4) Teachers of vocational courses should be the masters of respective trades.
- (5) The Scope and the concept of vocation courses should be explained to the students.
- (6) Vocational students should be given preferences in getting job recruitments.
- (7) Vocational courses should be respected.
- (8) To run vocational courses properly the typewriters should be in working conditions and text books for the course should be made available.
- (9) These courses should be started early in school.
- (10) Vocational courses should be offered at +3 level also.
- (11) Students of +2 are 17 years of age. They cannot sit for the competition of Grade II stenographer because of age and qualification restrictions. Qualification for this competition is graduation. Therefore, the rules should be modified to accommodate vocational students.

(12) Number of School, offering vocational courses should be increased.

(13) Standard of teaching of Physics, Chemistry and Mathematics should be improved.

(14) Separate certificate for these courses should be awarded.

(15) Staff should be well qualified and the students should be provided with enough material and the syllabi should be improved.

(16) Course of telephone operator must be started.

(17) With the development of skills, information regarding placement, source of support for self-employment and avenues for higher studies should also be provided.

(18) Stenography course should not be taught in Govt. Schools since the medium of instruction in these schools is Hindi and the students are not able to grasp sufficient knowledge of English to perform Stenography job.

(19) Number of courses should be increased.

Other Information :

In the column of any other information, students have provided some useful pieces of information :

(1) Jobs are available only through contacts.

(2) Govt. is putting a lot of money in Govt. schools, but funds are not properly used with the result that the Students do not benefit. There should be regular checks to ensure that the funds are not misused. Students are not given papers for typing and they

are asked to replace damaged parts of machines at their own expense.

(3) The Students are given six months' training (Apprenticeship) in designing, printing and weaving at weaving centre of Ministry of Commerce but after training also they could not find jobs. During the discussion with teachers and principals, the following position emerged.

Students of Health care and beauty culture and stenography can get jobs but rest of the courses lack employment potential. Teachers were of the view that though employment opportunities are scarce even students do not want to go for jobs. They also expressed that employment opportunities should be clearly defined and vocational courses should be linked with employment.

Researcher discussed with Sh. B.P. Singh, the possibility of linking vocational courses with employment. As per him the Govt. are being requested to change recruitment rules in Government and semi Government organizations. Directorate of Education will be requesting the ministry of education who in turn may forward it to th Home affairs ministry for final decision.

Mr. Veer Raghavan feels that if we prepare a skilled worker he should be able to get a job on his own merits. In fact he emphasis self employment.

Mr. Ashok Chandra said that once vocational courses are linked with employment they will become popular and will no longer be considered as second choice.

Dr. Mrs. Sudha Rao expressed that I.T.I. and Polytechnics product is 62% employable, this should be made 100 % employable and then only the scheme can become successful.

It is heartening to note that due to CBSE efforts linking of vocational education with jobs has made a beginning . A news article in 'The Statesman' dated 23rd March, 1988 reads, "General Insurance Corporation has initiated a move to delink jobs from degrees and encourage job oriented education at the 10+2 level, says a GIC release. It has been agreed with central Board of Secondary Education that commencing from academic year June 1988, the Central schools in a few metropolitan town like Delhi, Bombay, Calcutta, Madras, Chandigarh and Luchnow would introduce a two year vocational course in general insurance and other allied subjects for students passing Xth standard with a minimum 60 percent marks. The course will be gradually extended to Central schools throughout the country.

GIC Chairman, Mr. Ashok Goenka has indicated that students passing the two year course with a minimum of 50 per cent marks would be appointed by GIC as apprenticeship assistant with a stipend of Rs. 1,000 per month. After successful completion of apprenticeship period of one year, they would be absorbed as regular assistants at a starting salary of Rs. 1,292 p.m. at "A" class cities and Rs. 1,227 p.m. at other places without undergoing the usual all India competitive examination.

Suitable weightage for vocational qualification will also be given in assessing their suitability for further promotion as officers in due course. Those passing the two year course with not less than 40 per cent marks would be eligible to compete for the posts of Assistants as per the normal recruitment rule".

CONCLUSIONS : The aforesaid discussion shows that all students,

teachers and Principals are aware of the fact that the aim of the Vocationalised education is employment but at the same time they agree that the aim is not being achieved because

i) Students are not aware of employment and self employment opportunities

ii) there is no link between teaching institutions and employing agencies

iii) Students are of minor age and

iv) Government have not formed any policy regarding employment of those who have passed out of vocational courses.

From the follow-up study of the pass out students, the researcher found that 65 percent students were pursuing higher courses, 18 percent were employed and 25 percent were self-employed. Out of those who were pursuing higher studies, only 20 percent were in higher Vocational Courses. Rest of the students were found pursuing other higher academic courses. It was also found that out of 12 courses, Electrical Technology, Textile & Designing, Stenography, Health Care & Beauty Culture, Marketing & Salesmanship, Dress Design and Making Courses are the ones which are helpful in getting a job.

This situation is not very heartening, even though not very disappointing either. It shows that there is a potential which needs support to yield results. Government have made a beginning by introducing some courses with the cooperation of employing agencies such as General Insurance and recently life Insurance Corporations.