The chapter studies the importance of industry involvement in the VEP.
CHAPTER VI

LINKAGE BETWEEN INSTITUTIONS AND INDUSTRY

6.1 Introduction:
The success of the VEP revolves around an effective collaborative arrangement between the Institute and Industry. Such a collaborative arrangement between schools and industries was envisaged in the NCERT document on Higher Education and its Vocationalisation (1976) as an implementation strategy. The vocational education programme follows a collaborative model of implementation in which basic skill training is provided in the institution and specialized training is provided through on the job training conducted in industries and also through production cum training centers. ‘Industry’ in the study of the vocational education programme is taken in a broader sense. The industry can be a factory, a service centre, a government department, hospital or farm or any agency, or an individual engaged in production or service oriented establishment which has the capability of providing the student with the desired vocational expertise in a particular occupation.

6.2 School – Industry Linkages for Development of Trained Manpower:
A strong School – Industry linkage is a necessity to bring about skilled and efficient manpower. The linkage between school and industry should not be partial, it should be a kind of partnership between both parties where both work with a common goal of developing human resources. It should not merely be confined to providing On the Job training or lectures to the vocational students by the experts form industry, but should include the industrialist cooperation right form the planning stage to the placement stage. A strong and healthy linkage between the institution and the industry has several benefits to the institution, students and the industry as well. The institution can start courses
after identifying the various manpower needs of the industry so that the students find employment on completion of the course. The institution can also develop the curriculum for the courses and revise it on a regular basis based on the changing needs of the industry. Thus keeping the course in demand among the student community. The students would be benefited with the sharing of infrastructure and sharing of expert services form the industry.

The institution can also make use of the OJT instructors for evaluation of their students based on their skills. And finally, for the placement of their students as well. On the job training which is an important feature in the VEP can be greatly facilitated with a strong linkage with the industry. This would in turn provide for the industry trained and skilled manpower to meet its requirements. And ultimately the cycle would end up making the students wage employment or self employment and make the Vocational course successful. This chapter discusses all the above mentioned features which emerge as a result of a strong school industry linkage and benefit not only the institution and students but the industry and society at large.

6.3 Importance of MoU between Institute and Industry:
Establishing of a MoU with the Industry is necessary as the institute can be sure of its students been absorbed by that particular industry for OJT. This would benefit the vocational students of the institute in obtaining effective training in reputed organisations. It would also expose the students to latest technology in the case of science and engineering courses. Students of all courses would also get the experience of working in a more professional environment. When asked the Heads of Educational institutions if they had established any MoU with the industry, 45% and 20% of the Principals at the HSS and College level respectively, claimed that have not made an attempt in
maintaining this linkage. It was mostly the Commerce based Colleges that had not made a serious attempt in maintaining this linkage.

From the above responses given by the heads of educational institutions on the absence of MoU with the Industry by a large number of institutions both at the HSS and College level, it can be concluded there is inadequate interaction on the part of the institutions with the industry. This in turn is definitely going to affect the quality of OJT provided to the students. Hence it can be said that the eight hypothesis, 'Inadequate interaction of Vocational Education institutions with industrialists in making Vocational Education more work oriented ' is true.

The Teaching faculties were also asked their view on the importance on establishing a MoU with the Industry. They were also asked their willingness and interest in establishing this linkage with the industry. Those who were willing to take the initiative in building this linkage responded with ‘Yes’ while others said ‘No’. Table No.6.1 below shows the responses given by the teaching faculty. Only 21 teachers responded to the question. Out of which 17 teachers showed their willingness to take the initiative to establish this linkage.

**Table No. 6.1 Teachers Response to Their Willingness in Taking the Initiative to Establish MoU with the Industry**

<table>
<thead>
<tr>
<th>INITIATIVE TO ESTABLISH MoU WITH INDUSTRY</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Engineering</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Humanity</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>GFC</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>4</td>
<td>21</td>
</tr>
</tbody>
</table>

**Total %**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.0%</td>
<td>19.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Source: Primary Survey
Establishment of a strong School – Industry linkage not only benefits the students in obtaining the necessary OJT, but has other benefits as well. Below are some of the benefits of a good school – industry linkage:

6.4 Educationalists & Industrialist Opinion on New Courses to be Introduced:

The heads of educational institutions as well as industrialists were asked their opinion based on their experience and knowledge to suggest some new courses that would have scope for greater employment opportunities in the state. There were many who preferred not to make any suggestions. But those who made suggested the following courses:

a. A course in Purchasing and Storekeeping could be introduced as apprenticeship slots and employment opportunities are available in this field.
b. A course in Multipurpose Health Worker or Nursing to be introduced and also could have vertical mobility in B.Sc.Nursing.
c. A course on Audio Visual Technician to be considered if IFFI is going to part of Goa. Also Goa is a Tourist destination where many parties and shows are constantly organized.
d. A course in Building Maintenance be introduced taking into consideration the growing number of Housing co-operative societies which can generate lot of employment for the pasouts who can undertake maintenance & minor repairs of the buildings.
e. A course in Health and Beauty culture be introduced considering the demand for Beauticians.
f. A course in Plumbing could also be introduced considering the demand for plumbers for smaller jobs.
g. A course in Library and Information Science be introduced which would provide qualified and trained librarians at the village and local level smaller libraries, and also in Schools.
Courses on Photography, Theater and Media Communication which would have scope for employment if IFFI is to remain in Goa.

While some suggested that if the Travel and Tourism course should be modified to suite the needs of the tourists.

At the College level the following courses were suggested for introduction which was felt to have scope for employment opportunities in Goa:

- Vocational Subjects in Business Management: many students are found to opt for Business Management in the general stream. Vocational subjects with stress on practical experience would develop specific management skills among students.

- Journalism and Mass Communication: vocational subjects in this were felt to be job oriented courses with a lot of scope for employment for the youth. Specially TV Journalism had to develop in Goa with the Goan news channel come up. This would provide job opportunities to the youth.

- Computer Science course was suggested to be made vocational as it is very widely used.

- Vocational courses in Medicinal Chemistry, Tourism Administration, Biodiversity were suggested by some.

- Vocational course in Instrumentation repairs was felt by some to have scope for employment. Especially the repairs of Cell phones due to the wide and growing usage of the instrument.

**Benefits of Strong School – Industry Linkage:**

**6.5 Industry Involvement in Curriculum Development and Management:**

The vocational curriculum is developed within the national curricular framework provided by NCERT and is based on the identification of job opportunities, specification of duties or tasks to be performed in the job, and analysis of each
task in terms of knowledge, skill and personality traits required to perform a particular task. As seen earlier, the vocational curriculum gives 70 percent of weightage to vocational theory and practice and 30 percent to language(s) and general foundation course (GFC). The languages and GFC are recommended to be the compulsory components of all vocational courses at the HSS level. A provision has been made for on-the-job training for 4-6 weeks during summer vacation which falls after the end of class XI and before beginning of class XII at the plus two level.

Apart form the practicals in laboratories/workshops at the institution, it is planned that strong school industry linkages be developed so that students get exposure to real work situation in the industry. The basic outline for the curriculum is framed by the NCERT and also the marks weightage for the respective subjects. However, the programmes has given sufficient freedom to States with regards to contents of the course curricula to meet the requirements of the particular local industry. Hence it is important for educationalists to frame the course curriculum after knowing the needs of the industry.

As mentioned above, the teaching faculty form institutions did do some kind of research to a limited extent to know the industry needs and the curriculum was revised accordingly. However, we have seen the industrialists opinion in regarding the relevance of the curriculum in the fifth chapter, but the response has not been very satisfactory. This suggests that, a through study has yet to be done on the part of the Institution in order to know the exact needs of the industry. Instead of pushing the responsibility on the already burdened Teaching faculty to visit industries to conduct a survey to know industry needs, the better option would be to involve selected industrialists in the curriculum development of the courses.
Seeking the involvement of the right industrialists not just in the curriculum development but also in the Management would enhance the quality of the vocational course. There are however a few names of industrialist that do appear in the advisory board of the vocational education programme in the State. But meetings need to be held more frequently to discuss issues on the vocational education programme. The industrialists selected should be able to make the time to give to the field of education their valuable input that would help in improving the standard of the course and ultimately the course passouts. It would also ensure in establishing a strong school – industry linkage which is so essential for the success of the programme. Listed below are some of the benefits to the vocational programme as a result of industrialists involvement in the management and development of curriculum:

6.6 Sharing Infrastructure

The facility to share infrastructure is one of the greatest advantage of having an effective school- industry linkage. Modern industry today uses the latest technology to keep in times with the rapidly changing technology. This technology is many a times too expensive and out of the reach of the common Government aided institution with limited funds. Hence, the only way for students to get exposure to these new tools and equipments is in the industry where they are undergoing on the job training. Establishing a MOU with the industry, would benefit the students tremendously. For this, an extra effort has to be made form the part of the institution offering the vocational course in establishing this relation. However, in reality not many institutions have been successful in maintaining a strong MOU with the industry. Definitely students of some institutions find OJT for themselves in reputed firms with the help of a letter provided by the Head of the Educational Institution to the students to approach the firms. Some vocational coordinators personally speak to the
persons incharge in the firms and request placement for OJT for their students. But for some not so fortunate students in some institutions, are unable to find placement for OJT for themselves and are asked to take up some project in the Institution itself as OJT.

During personal interview, students complain that many firms do not allow them to handle the equipments themselves. These firms have their own limitations. They are of the opinion that the vocational students are careless and immature and hence they cannot trust expensive machinery to them, so they are expected to learn by the observation method.

6.7 Expert Services

A strong school — industry linkage also facilitates schools in making use of expert services form industry in delivering class room lectures. Besides sharing of infrastructure, there can be sharing of expert services form the industry as well. These experienced and knowledgeable persons could be used as Guest Faculty for the courses. The vocational programme makes provision for Guest Faculty on a Honorarium for teaching of the courses. These specialized experts form the industry could be used to share specialized knowledge with students. The institution should get successful entrepreneurs from the industry to address students so as to encourage and motivate them to go in for self employment. Experts are known to be busy with their own work schedule. Relations should be maintained with the industry such that, the experts are willing to spare time for teaching vocational students. They should be willing to be flexible and adjust their timing with that of the vocational teaching in the schools or industry where ever it is planned to be conducted.
6.8 Evaluation of Students:

If the employers or On the job training instructors are involved in the process of evaluating the students performance, they can see for themselves the quality of the product coming out of this system. Hence, it is advisable to keep these experts as members of the panel of examiners, and suitable remuneration or honorarium may be paid to them for this purpose. However, the system in reality slightly differs. The OJT instructors grade the students under them at the end of the training. But the final grades are eventually given to the students by their School Teaching faculty.

6.9 Placement

If the linkages are properly established with the concerned industry, students can get employed by the industry where they underwent OJT. If the students cannot be employed by that particular industry, the student could be recommended by them for absorption in other organizations. The industry too would benefit as they would be in a position to choose from the many students, those suitable for their firm. The industry would be in a position to well in advance the capabilities of the student to be employed.

Suggestions made by Heads of Educational Institutions towards Placement of Students:

Below mentioned are few of the common suggestions made by the Principals as to what could be done inorder to help students get placement:

- Campus interviews form the related industry could be help in the College campus. For example for courses like Bio technology, Bio- Tech firms can be contacted about the course curriculum and campus interviews can be conducted in order to absorb students.
- Govt. and Non-Govt. agencies should be encouraged to coordinate with the Colleges and HSS to absorb vocational students.
- Some posts should be reserved at employment exchange for vocational passouts of the VEP at the HSS as well as College level.
- Maintaining a good MoU with industry is the best solution that would encourage firms to absorb students soon after OJT with them.

6.10 Apprenticeship Training

There is a Provision for Apprentice Training for HSS students that are interested in obtaining additional practical work experience on completion of their course. However, it has been observed that not all students are aware of the training provided to them. Hence it is the duty of the HSS to inform students about the facility to undergo Apprenticeship training. The HSS have to also see to it that the desired linkage is maintained with the industries and organizations that are registered under the Apprenticeship Training Board. So that maximum number of students can benefit from the training. A strong School - Industry linkage plays a vital role here also. Institutes should try and develop a good linkage with Industries that are eligible to take students for training.

Some of the limitations mentioned by the Heads of Educational Institutions were that, some of the organizations send the letter to the institutes only in the month of October - November inviting HSS to send students for Apprenticeship training. Many interested students are unable to take the benefit of this training because of the late notice. By the month of June students have already taken admission in Colleges or other Institutions and are unwilling to discontinue mid ways.
In the case of VEP at the College level, there is no provision made for Apprenticeship training for the students.

6.11 Difficulties Faced in Making the VEP Successful:

Various parties involved in the smooth running of the VEP have expressed their difficulties in handling their duties efficiently. It is all well said that institutions have to provide for OJT for their students and that the training has to be effective enough to help students gain confidence in themselves to take up gainful employment. However if we look beneath the lines, the institutions also face a lot of problems. The Principals feels it is the duty of the vocational teachers to take the initiative in providing for OJT and seeing to the establishment of Production cum Training Centers etc in the Institution. This is because the principal is too busy to take charge of these aspects, as in most cases the principal has under him cumbersome administrative responsibilities of the effective and efficient running of the whole institution. In the case of some institutions, the work load includes that of many streams viz. Science, Commerce and Arts faculties of the general stream, as well as the vocational stream. This is a heavy burden on the principals. And it has been observed in most cases that more preference is given to the General Stream which is regarded to have more intellectually superior students studying it.

Hence, it is considered the responsibility of the teaching faculty cum coordinator of the vocational programme in the institution to take charge. He in turn will hand over the duty to his subordinates who are the teaching faculty for the particular course. Many of these faculties are not willing to put in an extra effort as they feel they are paid the same amount of remuneration as the teaching faculty teaching the general stream. However, some dedicated teachers do take an extra step in helping the students. In the case of the Higher
Secondary it has been observed that a lot of vocational teachers are taken on a part time basis. Many teachers teaching the vocational course are found to teach the general as well as vocational subjects. The teachers appointed on a part time basis are paid very low wages and the expectations from them is tremendous. The part time faculty is paid a monthly salary of Rs.2000/- which is extremely low to be paid to a qualified teacher.

Institutions located in rural areas face a critical problem in finding for their students suitable places for OJT due to lack of industries located in those areas. Hence, even apprenticeship training becomes a problem for interested students.

It can be said that, the main reason for all these loopholes lies in the management structure for the Vocational Education Programme at the implementation level. It is only a well planned and implemented programme that can run successfully with all possible aspects taken into consideration.

Teachers have a complaint that the office staff in the Department, where the students are send for OJT do not cooperate with them. They give the students jobs not concerned with their subject.

Most Students passing the VEP at the HSS level are minors at the time when they complete the course. Hence cannot find employment easily.

Production cum training centers are sometimes not successful as the location of the HSS is isolated from the main residential locality.

6.12 Government Incentives to Industry:
The human resource development cannot be the responsibility of the school system alone. The user agencies of the skilled manpower should also contribute
in the process of training and extend its support to the school system in training students. Unlike countries like Germany where it is the responsibility of the Industry to train there employees, India has a very liberal policy. Hence as a means for encouragement to develop MoU with schools, government should provide some incentives to the Industry.

6.13 Need for Creating Awareness of the VEP:

It is necessary to create awareness of the vocational education programme among industrialists, students and the parent community at large. As many industrialists are found to be unaware of the VEP, so are many parents. While some do not have the right knowledge of the programme and hence look down on the students studying the vocational programme as inferior. Some industrialists when randomly asked if they absorb vocational students for training were found to be unaware of vocational courses. The Parent community and the general stream students were of the opinion that the vocational stream was meant for those students who could not get admissions into the general stream. Hence, the concept of the vocational education programme in the minds of the parent and student community was incorrect. Negative attitudes of the public due to ignorance needs to be removed through proper enlightened awareness.

In order to create awareness in the community, exhibitions can be organized, contact can be developed with parents through Parent Teacher Associations, or contacts with voluntary organizations and community leaders. There can be open sale counters during fairs and public functions for goods produced during training for products like garments, snacks etc. or free servicing of automobiles or repair of electronic & electrical appliances during the fair.
Besides creating awareness of the VEP to the society, the vocational students studying the course also should also be made aware of the concept and policy issues related to the vocational education programme. They should be made aware of the facilities available to them, like apprenticeship training for students interested in obtaining an extra practical experience on the job on completion of the course, government aid to interested students in going in for self employment etc. It was found that many students were not even aware of these things. Some had not even heard of the term apprenticeship training before and claimed they were not aware of Government facility to give loans to start up business.

**Various Methods adopted by the Heads of Educational Institutions in creating awareness of the VEP:**

The heads of Educational Institutions were questioned if they made any attempt in creating any kind of awareness of the VEP and amongst which segments of the society. They were asked the various methods used by them in creating this awareness. Some of the responses given by HSS and College Principals are listed below:

a. Awareness of Vocational courses at college level is made in the College Prospectus and Brochures supplied. Students are made aware of the course at the time of admissions. Most Colleges have claimed to have used this method.

b. Circulars are sent to various Schools and HSS.

c. Information Pamphlets and other relevant material are sent to all near by HSS by May.

d. One or two Teaching faculty is been sent to neighboring Schools to make aware of the vocational courses at the HSS level to students through Career guidance lectures in vocational education conducted at the Schools.
e. Advertisements are put in the newspapers by some Colleges. In addition to that write ups are put in the college prospectus on the vocational subjects offered by the institution. There is also an orientation at the beginning of the academic year where students are made aware of the courses.

Conclusion:

It can be concluded that with a strong institutions – industry linkage, not only does the institute and the students benefit form it, but it would benefit the industry as well. Industry can be involved in taking an active part in the vocational programme at different levels. Experts form the industry can be involved in the development of the curriculum of the courses and also their help could be sought in the active management of the programme. Sharing of infrastructure and of experts form the industry is another benefit to the institute. And finally, the industry would be benefited with the choice of skilled personnel to choose from. Students on the other hand would seek employment for themselves.