

Attitudes of Administrators of Vocational Education Institutions in relation to certain Personal and Demographic Variables

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ABSTRACT

This paper presents an in-depth study of deficiencies, hurdles and conflicts in the existing system of vocational education in the state of Andhra Pradesh. The sample of the study comprised of 84 institutes, which consisted of 24 High Schools, 24 Junior Colleges, 24 Industrial Training Institutes and 12 Polytechnic Colleges and 100 Administrators. For knowing the attitude of administrators an attitude scale was developed by the investigators. A three stage stratified random sampling technique was used. The results of the study revealed that administrators are not happy with the prevailing situation in the field of vocational education. Further, a large number of subjects expressed their inclination to have a separate independent stream of vocational education instead of incorporating vocational courses in the institutions of general education. Hence, it is necessary that the government and the managements involved in the process of vocationalisation should plug the loopholes and eliminate the deficiencies so that ideal vocational education may be provided in tune with the demands of the present day society.

Introduction

The attainment of independence ushered in a new era of national development with determination to eliminate the poverty of the people and to ensure reasonable standard of living for all. Modernisation

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and rapid development of industry required skilled personnel in various new fields, who would become instruments of social transformation and economic progress.

Although a large number of educationists recommended incorporation of vocational element in the formal system of schooling throughout the world, very little has been achieved in this direction. In India the modern educational system was developed on the basis of British system of education. One such change is vocationalisation. The father of the nation, Gandhiji, propounded the Basic Education in 1937 (Wardha Scheme of Education). In 1952-53 Madaliar Commission suggested multipurpose education (Vocational Courses) in 12+3 system of education. In 1964 the Education Commission recommended Work Experience in 10+2+3 system and Iswar Bhai Patel Committee in 1977 slightly modified the concept and recommended 'Socially Useful Productive Work'. *The National Policy on Education* (1986) recommended introduction of vocational programmes at Senior Secondary Level, Intermediate Level and restructuring of job-oriented courses at the first-degree level. In spite of all these efforts, the progress towards vocationalisation of education has not been satisfactory and in tune with the manpower requirements of the economy.

What led to the failure of the attempts at vocationalising our education? Was it because of the conflict between the ideals of the policy makers and the aspirations of the people or that of between the theory and practice? The meager research conducted in this area reveals that poor curriculum, untrained teachers, negligible exposure to practical and skill-oriented activities, lack of facilities, insufficient financial support, etc., were the most important causes for failure in vocationalising our education. Hence, the present study was undertaken to examine the causes of the failure in this area.

Objectives of the Study

The main objectives of the study were:

1. To study the attitude of the administrators towards different aspects of the vocationalisation of education.
2. To note the variations in the attitude of administrators towards vocationalisation of education across personal and demographic variables.
3. To make recommendations for the improvement of vocational education at all levels in the state under review.

Hypotheses of the Study

1. The administrators in general do not possess positive attitude towards different aspects of vocationalisation of education.
2. The personal and demographic variables of administrators do not influence their level of attitude towards different aspects of vocationalisation of education.

Variables included in the Study

As the present research was concerned with the study of vocational education institutions in relation to certain personal and demographic variables on the basis of the attitude of administrators, the dependent and independent variables included in the investigation are as follows:

Dependent Variable

Attitude of administrators toward different aspects of vocationalisation of education.

Independent Variables

The independent variables considered in the investigation are sex, age, level of association, type of management, locality, type of institution, medium of instruction, teaching experience and exposure to in-service training programmes.

Method

The present study was a survey type of research. The various procedures adopted in the construction and standardisation of data gathering instrument to measure different variables included in the study and the methods followed in selection of the sample, collection of the data, scoring and analysis are as follows:

Tool Used

A five-point attitude scale with 86 items for the administrators to know their attitude towards vocationalisation of education was developed. It was done so following all the steps included in the construction of attitude scale, viz. collection of items from different sources, preparation of item pool, scrutiny of the items by the experts, preparation of pilot form, pilot study, item analysis, selection of items

for final study, establishment of reliability and validity, etc. In this tool the items regarding personal and demographic variables were also incorporated to collect the relevant information.

Sample

The study was conducted in the State of Andhra Pradesh. Geographically Andhra Pradesh State is divided into three regions, viz., Coastal Andhra, Telengana and Rayalaseema. By selecting one district from each region at random the three regions were covered at the first stage of sampling.

At the second stage, educational institutions, which provide vocational education in each region, were sampled. There are several types of vocational institutions like High Schools with vocational courses, Junior Colleges with vocational courses, Industrial Training Institutes and Polytechnics. The first two types are institutions of general education and also providing vocational courses whereas the latter two types of institutions are exclusively meant for providing vocational courses. Keeping this in view and to give representativeness to all categories, 8 High Schools, 8 Junior Colleges, 8 Industrial Training Institutes and 4 Polytechnics were selected at random, treating them as a sampling unit. Thus, from each region 28 institutions of the four types and in total 84 institutions were included in the sample.

At the third stage, the sampling units were administrators. The sample consisted of 100 administrators selected from heads of institutions and district, regional and state officials, who were incharge of vocational education by following the cluster sampling technique. Thus, the sampling techniques employed in the investigation may be called as a three stage stratified random sampling technique.

Collection of the Data

The investigator personally visited all the institutes in the sample. The administrators were given copies of the instrument and requested to respond to all parts of the instrument without leaving any single question.

Scoring of the Responses

As the instrument used in this investigation was the Likert's type of attitude scale on a five-point scale it was been scored by giving weights

5, 4, 3, 2 and 1 in the case of positive items and 1, 2, 3, 4 and 5 in the case of negative items, respectively. The grand total to each individual on the entire scale was obtained by adding the weights on all the statements. The information provided by the respondents in the personal data sheet was numerically coded to suit the computer analysis.

Analysis of Data

As the data thus collected is qualitative in nature, item-wise analysis was carried out to identify the specific deficiencies in different aspects of vocationalisation of education.

Statistics such as frequencies, percentages and Chi-square were employed to make the qualitative description more precise.

The total scores obtained by all the subjects were carefully analysed employing appropriate statistical techniques such as mean, median, mode, quartile deviation, standard deviation, skewness and kurtosis, etc.

To test different hypotheses, the inferential statistical techniques such as ‘t’ test and ‘F’ ratio were employed.

Results

(i) Description of the Distribution of Administrators’ Attitude Scores

TABLE 1
Distribution of Attitude Scores of Administrators

<i>Class Interval</i>	<i>Mid Values</i>	<i>Frequency</i>	<i>Smoothed Frequency</i>	<i>Cumulative Frequencies</i>
190-199	194.5	5	5.67	5
200-209	204.5	12	8.00	17
210-219	214.5	7	11.00	24
220-229	224.5	14	12.00	38
230-239	234.5	15	15.67	53
240-249	244.5	18	13.34	71
250-259	254.5	7	12.34	78
260-269	264.5	12	7.67	90
270-279	274.5	4	6.67	94
280-289	284.5	4	3.00	98
290-299	294.5	1	1.67	99
300-309	304.5	0	0.34	99
310-319	314.5	0	0.34	99
320-329	324.5	1	0.34	100
		N = 100		

Mean	=	238.00	Q.D.	=	17.50
Median	=	237.50	S.D.	=	25.55
Mode	=	236.50	Sk.	=	0.02
Range	=	131.00	Ku.	=	3.63

Table 1 shows that the mean scores obtained by the sample is 238.00, which is less than the average level ($86 \times 3 = 258$) on the scale. The values of median and mode also indicate that the general level of attitude towards vocationalisation of education is far less than the average level. Hence, it can be concluded that the administrators, in general, do not possess positive attitudes on different aspects of vocationalisation of education'. As the measures of the central tendency are in the descending order, the distribution is said to be slightly skewed. Of course, it is evident from the calculated value of skewness (0.02) that the distribution is skewed at negligible level. The value of kurtosis 3.63 discloses that the distribution is slightly platy kurtic.

The range of the distribution of scores is 131.00 (highest score = 325 and lowest score = 194). Quartile deviation and standard deviation are 17.50 and 25.55 respectively. These measures of dispersion reveal that the spread in the distribution is almost normal. The relationship between quartile deviation and standard deviation as exists in normal probability curve ($2/3 \text{ SD} = \text{Q.D.}$ i.e. $25.55 \times 2/3 = 17.50$) is almost observed in the distribution and therefore, it can be said that the distribution belongs to the family of normal curve. As the distribution of administrators' attitude scores follows normality with marginal exceptions, it is feasible to apply all the parametric statistics in the analysis of data.

(ii) The Influence of Personal and Demographic Variables on the Attitudes of Administrators

The sample was divided into different sub-groups based on their personal and demographic variables to see whether there existed any significant difference among the groups in their attitude towards vocationalisation of education. Each of the ten variables was studied independently to test the hypothesis.

Gender

Results showed that there was no difference in the attitude of male and female administrators (Mean for male = 243.74, Mean for female = 243.43, $t = 1.57$, $P > .05$).

Age

The mean attitude score of administrators aged 36-45 years was higher (Mean = 244.57) than the administrators of age groups 45 and above (Mean = 234.98) and up to 35 years (Mean = 224.24). The differences in the mean scores were significant ($F = 3.63$, $P < .05$).

Teaching Experience

The mean attitude score of administrators who were experienced 15 years and above in teaching was higher (Mean = 240.02) than the administrators of 6-15 of teaching experience (Mean = 238.73) and up to 5 years (Mean = 224.20). The differences in the mean scores were not significant ($F = 2.48$, $P > .05$).

Level of Association

The mean attitude score of administrators who were associated with Polytechnic Colleges was higher (Mean = 255.36) than the administrators who were associated with ITIs (Mean = 237.30), Junior Colleges (Mean = 231.55) and High Schools (Mean = 232.33). The differences in the mean scores were significant ($F = 5.64$, $P < .01$).

Type of Association

Administrators associated with ITIs and Polytechnic Colleges have more favourable attitude (Mean = 243.87) towards vocationalisation of education than those associated with High Schools and Junior Colleges (Mean = 231.94). $t = 2.67$, $P < .05$.

In-service Training Programmes

The mean attitude score of administrators who were not attended in-service training programmes was higher (Mean = 240.72) than the administrators who attended long back (Mean = 235.80) and who attended recently (Mean = 238.50). The differences in the mean scores were not significant ($F = 0.30$, $P > .05$).

Locality

There was no difference in the attitude of urban and rural administrators (Mean for urban administrators = 235.63, Mean for rural administrators = 239.68, $t = 0.78$, $P > .05$).

Type of Management

The mean attitude score of administrators who were associated with government institutions have secured a better mean score (Mean = 238.45) than those who were associated with aided institutions (Mean = 233.78) and unaided institutions (Mean = 233.06). The differences in the mean scores were not significant ($F = 0.39$, $P > .05$).

Medium of Instruction

The mean attitude score of administrators who were associated with English medium have secured higher (Mean = 250.32) than the administrators of Telugu medium (Mean = 237.29) and the administrators of both media (Mean = 228.63). The differences in the mean scores were significant ($F = 4.67$, $P < .01$).

Type of Institution

Further, there was no difference in the attitude of administrators who were associated with single sex and co-educational institutions (Mean for single sex = 237.54, mean for co-education = 237.12, $t = 0.06$, $P > .05$).

Major Findings

The major findings arrived at have been presented under three headings viz., findings based on item-wise analysis, description of the distribution of scores and influence of other variables included in the study.

Findings Based on Item-wise Analysis

On the basis of the administrators' attitudes it has been found that the following aspects are quite disturbing:

- 89% of the administrators felt that the vocational courses introduced at different
- Levels in different institutions have no proper interlinkages.
- About 82% administrators opined that the vocational courses of education are not suited to the structural changes in the economy and hence leading to educated unemployment.
- 72% of the administrators accepted that there is a scarcity of trained experts in the field of vocational education.

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- 89% of the respondents have expressed their inclination to have a separate independent stream of vocational education instead of incorporating vocational courses in the institutions of general education.
- 96% of the administrators felt that there is no provision for in-service training programmes.
- 74% of the administrators are of the opinion that there should be a separate apprentice board.
- 87% of the administrators expressed that vocational education institutions are not able to run successfully due to dearth of trained personnel.
- 66% administrators disclosed that the available teachers have neither practical experience nor well-trained, hence they have not been able to develop necessary skills among students.
- 83% of the administrators expressed that there are no promotional opportunities for teachers working in vocational education institutions.
- 78% of the administrators opined that vocational education teachers are not suitably rewarded for their efforts.
- 92% of the administrators expressed that there is no coordination between vocational institutions and local industries.
- 46% administrators disclosed that the syllabus in the vocational education courses is heavy.
- 59% of the administrators expressed that the society in general and the teachers of general education in particular do not show any respect to the staff of vocational courses.
- 88% administrators felt that the placement service centres are not available in vocational education institutions.
- 77% of the administrators accepted that the curricular activities have not been conducted uniformly in different institutions.
- 82% administrators expressed that the curriculum has not been revised in accordance with the changing times.
- According to 92% of the administrators latest equipment is not available in vocational education institutions.
- As many as 76% of administrators have expressed that the practical manuals are not sufficiently available in vocational education institutions' libraries.

- 75% administrators revealed that there are not facilities like vocational guidance.
- 95% of the administrators disclosed that there is no positive outlook in the society on lower level vocational courses and media is not trying to inculcate positive thinking among the people towards vocational education.
- About 81% of the administrators revealed that suitable teaching aids are not available to the teachers.
- 75% administrators observed that the supervisory staff to monitor the programme has been inadequate.
- 93% of the administrators felt that there are no suitable textbooks either in English or Telugu medium.
- 77% of the administrators revealed that the conduct of the practical examinations by engaging part-time teachers is highly disappointing.

Findings Based on Description of the Distribution of Scores

- The distribution of attitude scores of the sample indicated that the attitude scores obtained by administrators are not having positive attitude towards vocationalisation of education. (Mean=238.00, Median=237.50 and Mode=236.50 which are at lower level than the average point of the scale, 86 3=258) which means different issues related to the existing vocational education are not favourable to them.

Findings Based on Influence of Personal and Demographic Variables

- With regard to the administrators three personal and demographic variables could significantly influence their level of attitude towards vocationalisation of education. They are age, level of association and medium of instruction.
- Both young (up to 35 years) and old administrators (45 and above) possess less favourable attitude towards vocationalisation of education (224.24 and 234.98) than those of the middle age group (36-45 years). (244.57).
- The administrators associated with the institutions of general education have exhibited significantly less favourable attitude

towards vocationalisation of education than those associated with separate institutions of vocational education. (231.94 and 243.87).

Educational Implications of the Study

- The policy makers and curriculum planners have been experimenting with the restructuring of the courses at the first degree level to incorporate vocational/occupational opportunities in general education. In other words they are called job-oriented courses they include subjects like sericulture, aquaculture/fisheries, dairy technology, industrial chemistry, bio-technology, etc. Instead of running these courses in the institutions of general education it is better if they are run in separate institutions in the area where there is employment potential.
- Indian education has the inherent character of vertical linkages for the progress of a student from the lower level to the higher level in general education stream. It is also necessary to develop such kind of linkages in the major stream of vocational education. There is no need to restrict the entry to different professional courses only to those who acquire a specified qualification in general education. For example, the system allows intermediate students to get admission to M.B.B.S. course. Why not a physiotherapist or a nurse or a para medical assistant is eligible for admission to M.B.B.S. course? If we specify a minimum level of general education for entry in to professional courses why not we specify a minimum level of vocational education for the entry into the related professional education? This kind of inter linkages at different levels of vocational/technical/professional courses is the need of the day. The society in general does not exhibit any unfavourable attitude towards the vocational programmes even at the lower level.
- Keeping in view the above points and examples it would be possible to develop vertical linkages meaningfully among vocational/technical/professional courses. For example, an electrician who is trained in house-hold wiring should be allowed to become an electrical engineer provided that he/she fulfills the minimum required level of qualification in terms of vocational education. Then the parents may not hesitate to send their children to vocational courses at the lower level.
- The courses that are devised in the field of vocational/technical stream should have social relevance. The structural changes in

the economy, the priorities given in our development plans, the local agriculture and industrial needs and the interests of the people should form as the basis for designing a variety of vocational and technical courses.

- Any innovative work will be successful only when the course material is prepared well and made available in the market in any language. If not we are sure to get a bitter experience of failure (as in the case of B.C.A.). Without the necessary study material, well-trained teachers, library and laboratory facilities we have been expanding our education by introducing new courses both in general and vocational/technical education. This is not a good sign. Developing an appropriate curriculum, preparing revised study material, producing sufficient number of trained teachers, increasing necessary infrastructural facilities including academic inputs such as laboratory, library, worksheds and field experiences, etc., are the essential steps involved in making any programme of education qualitatively attractive.
- The vocational and the lower level technical courses are mostly related to the production of semi skilled persons with lower abilities both in the general education and the vocational education. They need to be given more practical oriented education, which helps them develop the required skills to perform the given task independently. But unfortunately most of the vocational courses which are being conducted aims at providing the theoretical knowledge only about the trade or vocation and not the practical orientation. Because of this reason the students who complete vocational courses are unable to stand on their own and the public in turn have lost faith in vocational education.
- For over decades, many attempts have been made to emphasis that there should be close association between industries and vocational education institutions. The apprenticeship act was more rigorous earlier than today; the field experience was more effective in the past. The curricular activities both under theory and practical should be specified explicitly to make curriculum effective and purposeful.

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