CHAPTER III

RESEARCH METHODOLOGY

Introduction

This chapter presents the profile of the study area, statement of the problem, hypothesis and objectives of the research. On the basis of the objectives the researcher formulated the research methodology, and tools for data collection, sample structure, and sample size. The contents of data analysis, the design of the study, the scope of the study, salient features of Dindigul District and organization of the study.

Profile of Dindigul District

Dindigul district was bifurcated from the Madurai district on 15.9.1985, which has a hoary past sway of Muslim monarch, Tippusultan. The King Muthukrishnappa naicker constructed the historical Rock Fort of this district.

Dindigul is located in Tamil Nadu, a Southern state of India. Dindigul is administrative headquarter. It is situated 420 km south of the state capital. Dindigul district is bounded by Sivaganga and Trichy districts in the East, Theni, Coimbatore districts and Kerala State in the Western side, Erode, Coimbatore, Karur districts on the Northern side and Madurai Districts in the South.
The study is conducted in Dindigul District. Tanneries are thickly situated in this District. The finished and semi-finished leather work has been carried out in Dindigul. A large scale of Brick industries is functioning in this District. Lock and Iron Safes are produced in a quality manner and very famous. Handloom, Rice milling, Groundnut, and Vermicelli are the other type of food based Industries functioning in this District.

It is the fifth largest district in Tamil Nadu and comprises three Revenue Divisions, eight Taluks, and fourteen Panchayat Unions. Dindigul is the sixteenth most populous area out of the total 32 districts in Tamil Nadu.

This district has small scale handloom industries at Chinnalapatti, which is located 11 kms away from Dindigul town on the Madurai-Dindigul national highway. Dindigul city has an important whole sale market for onion and groundnut. Near to this district, the famous Dhandayuthapani Temple is situated at Palani Hills. However, Kodaikanal, a popular summer resort is located at an altitude of 2133 meters in the Western Ghats, is also called the ‘Princess of Hills.’ A notable feature of this hillock is “Kurunji ‘flowers blooming once in 12 years.

Educationally, Dindigul is well developed and has a sound infrastructure with good educational institutions. As of 2016, there are 19 municipal primary schools, 23 other primary schools, eight middle schools and 15 higher secondary schools in the city. There were ten other private schools within the town. There were four engineering colleges and three arts and science colleges. Gandhigram Rural University is the only university in Dindigul.

The municipality is maintaining four dispensaries, five maternity homes, eight family planning centres, three Siddha and one Ayurvedic centre. The Government District Headquarters Hospital is located in Dindigul and has 350
beds. The town has more than five private hospitals, 35 maternity centres, 15 laboratories and one blood bank. The historic St. Joseph Mission Hospital with the 250 beds is one of the major hospitals in the city. For all the advanced health care systems, Madurai city is the nearest destination.

**Statement of the Problem**

Despite large numbers of educated youth, there is a shortage of skilled workforce; which includes technical/vocational education. This is the impasse situation among the youths who are seeking jobs. They lack mainly with three types of skills required in the industries, i.e., communication skill, analytical skill, and problem-solving and domain. While in interview approximately 60 percent candidates are screened due to lack of communication skills. The rest of 25% were tested for analytical skills, and 5% of them were a lack of knowledge in their respective functional domain. Hence 90% of educated youths lacked in one of these three primary skills required for job and employment. Only 10% of educated peoples in India are getting a job opportunity (EDUCATED UNEMPLOYMENT, 2014).

The ICT will enable the individual vocationally/ technically provide enough support physically/mentally as a skilled person. Upon this background, it is pertinent to investigate into the viability of Information Communication Technology (ICT) in knowledge development with intensive practical in vocational/technical education institutions. The purpose of this study is to analyze the use of ICT in developing skilled workforce through vocational skill providing institutions in Dindigul District of Tamil Nadu State.
Title of the thesis

A Study on the use of ICT Tools in Vocational Skill Development Programme in Dindigul District.

Area of the Study

This study is focused on both Rural and Urban region of Dindigul district. Tamil Nadu. Spread over an area of 6266 km², it has three revenue divisions, eight taluks, and 14 panchayat unions.

Operational Definitions

ICT tools which are used for imparting vocational skills through PPT, Audio Video materials, Web resources and Network communication devices.

Vocational skill is an ability that provides an individual for his economic development and sustainable growth

Objectives of the Study

The objectives of the study are given below

1. To understand the environment for imparting vocational skills in the skill providing institutions in Dindigul District.

2. To identify the ICT skills among the teachers who are providing vocational skills in the skill providing institutions.

3. To identify the strategies and ICT tools for providing vocational skills in the institutions.

4. To understand the problems faced by the vocational skill providers in Dindigul District.

5. To offer a suggestion for the efficient implementation of the vocational skill through ICT.
Hypotheses

Based on the above objectives, the following hypotheses were framed, and then validity was tested.

1. There exists a lack of environment facility for imparting vocational skills in the skill providing institutions.

2. There exists a lack of knowledge on ICT skills among the vocational skill providing teachers in the institutions.

3. There exists curiosity in enriching the strategies and ICT skills to provide vocational skills among the skill providing teachers.

4. There exist barriers in providing vocational skills through ICT in the skillproviding institutions.

5. There exists clear vision on ICT skills required for enhancing the skill training among the skill providers.

Methodology

The design is appropriate for the study since data are obtained from vocational education teachers and vocational skill providers through the use of a structured questionnaire on the role of ICT in skilled manpower development through vocational technical education among the vocational skill providing institutions.

Design of the Study

The research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way in the research study.
Period of the Study

The study covers the period of two years from 2013-2015. The primary data were collected from individual respondents from May 2015 to September 2015.

Sample Design

The type of Sampling

Simple random sampling was a tool for data collection, and stratified structure questionnaires were used for the survey. The close-ended questions and multiple choice questions were used to get the response of the respondents.

Sample Frame

Since the study is related to Dindigul district of Tamil Nadu state, the sample of the vocational skill training providers are drawn from all parts of this district; though it was limited by the number of the vocational skill training institutions in different areas.

The Sample size

The study is conducted based on samples collected from 250 respondents from vocational skill providers in Dindigul district. A sample of 200 vocational educators and 50 the owner of the vocational education institutions were used in this study. These include ITIs, schools, Government departments, Private institutes and NGOs who provide vocational skills. The instrument for data collection in this study was a structured questionnaire designed to elicit needed information from the respondents. The questionnaire was made up of items reflecting on the roles of ICT in skilled manpower
development through vocational technical education among institutions in the study area. There are discrepancies across different data sources, which were addressed by using information from reliable sources.

**Tools for Data Collection**

Both ‘primary’ source and ‘secondary’ source were used in data collection. The primary sources for the data collection are inclusive.

Secondary sources were collected from Books, Journals, Periodicals, News Paper reports, Census reports and Internet Source. As the research was qualitative in nature, an in-depth interview of respondents served as the primary tool in the data collection.

**Statistical Techniques**

Data were analyzed by using the Statistics Package for Social Science (SPSS). Analytical tools such as simple percentage and Chi-Squire were applied for finding out the degree of difference existing between two variables. Moreover, suitable diagrams, case study, and relevant statistical tools were utilized whenever and wherever necessary.

**Data Analysis**

The process of data collection was in the form of conversation dialogues which are quantitative and qualitative in nature. The qualitative analysis was used in the research study. The environment of the institution, student admission problems, hardship in conducting the vocational training in the institute are observed. The infrastructure facility has the soft, and hard skill, ICT
equipment for teaching also be taken into consideration. Standardized scaling techniques were used in the questionnaire in eliciting details of the above-quoted areas of perception. The objectives carefully analyzed the content of every bit of respondents. The collected data were put in order and examined systematically to fulfill the goals.

**Limitations of the Study**

The following are the limitation of the study.

Vocational Education, Training & Skill Development is a huge sector which is gaining tremendous importance in recent times. However, not much research has happened in the past in India and State of Tamilnadu about the various aspects related to this sector. The researcher has attempted to study all aspects related to this area, however, due to limitations of time, data availability, insufficient literature and limited previous research by other researchers have put forth the need for further research on this topic.

**There is scope for further research in the following areas:**

- At present, there is no dedicated and focused initiative at the state and the centre for vocational faculty training and development. Can a separate National level Vocational Teacher Training Institute be established? Can State level Institute for this purpose be also established? The level of technical exposure than theoretical also fixed during the training for all Vocational Teachers.
• The National Skill Development Corporation (NSDC) is trying to create close linkages with industry to increase industry participation in the VET and Skill Development Sector. However, there is a need for continuous research in understanding changing industry requirements for skilled manpower, labor market trends, employment opportunities, recruitment rules and concerns of industry. This ongoing research will help in bringing out courses which meet industry needs.

• Although the Central Govt. brought out the community college scheme a few years back it has not become successful. However, in concept, the community college system is extremely required to bring in community stakeholders into the development of the VET and Skill Development Sector. Community participation and close linkage with this sector are needed to bring out regional development. Further research is required to understand community problems and for effectively rolling out various schemes in line with the local needs. Community colleges in Tamilnadu, Kerala and other parts of India though few should be studied for further research.

• More than 90% of India’s workforce is in the unorganized sector. Further research is required to understand the skilling requirements of this area and to suggest additional solutions for bringing this area into the mainstream.

• Vocational Education, Training and Skill Development is offered through ITI/ITCs and VJCs and VTPs in Maharashtra much more such institutions can be studied and researched to understand the parameter surrounding the
quality of students. The VET models of the foreign countries other than those studied by the researcher can also be studied to understand how these models have effectively implemented in the respective country. The researcher feels that there is vast potential for this sector especially due to the national level initiatives were taken up by our Government for Skill Development and therefore the need for not only additional but continuous research.

**Organization of the Thesis**

The study is compartmentalized into five chapters.

- The **first chapter** deals with the introduction of the research study.
- The **second chapter** constitutes a review of related literature,
- **Chapter three** deals with the design and execution of the study.
- Data collection was analyzed in the **fourth chapter**.
- The **fifth chapter** endowed with findings of the study with suggestion and conclusion.

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