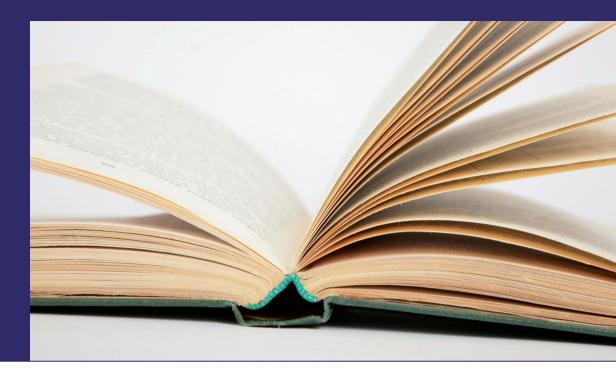
The book is an analysis of Self Instructional Material of Technical Programme implemented through Distance Education. The name of the programme is Diploma for Electrician and Domestic Appliances maintenance(DEDAM). After analysis it is found that the self instructional material (SIM) is useful and appropriate for learning of the content of the programme. The self Instructional Material fulfils the objectives of the programme .It is suggested by the respondents that due to various developments, daily new electrical domestic appliances are launched in the market , hence additional supplementary information on the new appliances should be provided by organising the guest lectures of the experts in the concerned field.



Rucha Gujar

Dr Rucha Rajesh Gujar B E Electrical (Electronics and Power), M A Distance Education, M Sc Subject Communication, Ph D Distance Education (Experience Academic: 23 years) (23 Research paper publications (10 International and 13 National), Attended 16 conferences (7 International, 8 national and 1 State, 2 book publications, Attended 26 workshops)

# A Case Study: Working Swot of SIM of Technical Programme





Rucha Gujar

A Case Study: Working Swot of SIM of Technical Programme

**Rucha Gujar** 

# A Case Study: Working Swot of SIM of Technical Programme

LAP LAMBERT Academic Publishing

#### Impressum / Imprint

Bibliografische Information der Deutschen Nationalbibliothek: Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.

Alle in diesem Buch genannten Marken und Produktnamen unterliegen warenzeichen-, marken- oder patentrechtlichem Schutz bzw. sind Warenzeichen oder eingetragene Warenzeichen der jeweiligen Inhaber. Die Wiedergabe von Marken, Produktnamen, Gebrauchsnamen, Handelsnamen, Warenbezeichnungen u.s.w. in diesem Werk berechtigt auch ohne besondere Kennzeichnung nicht zu der Annahme, dass solche Namen im Sinne der Warenzeichen- und Markenschutzgesetzgebung als frei zu betrachten wären und daher von jedermann benutzt werden dürften.

Bibliographic information published by the Deutsche Nationalbibliothek: The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de.

Any brand names and product names mentioned in this book are subject to trademark, brand or patent protection and are trademarks or registered trademarks of their respective holders. The use of brand names, product names, common names, trade names, product descriptions etc. even without a particular marking in this work is in no way to be construed to mean that such names may be regarded as unrestricted in respect of trademark and brand protection legislation and could thus be used by anyone.

Coverbild / Cover image: www.ingimage.com

Verlag / Publisher: LAP LAMBERT Academic Publishing ist ein Imprint der / is a trademark of OmniScriptum GmbH & Co. KG Bahnhofstraße 28, 66111 Saarbrücken, Deutschland / Germany Email: info@lap-publishing.com

Herstellung: siehe letzte Seite / Printed at: see last page ISBN: 978-3-659-69272-7

Copyright © 2016 OmniScriptum GmbH & Co. KG Alle Rechte vorbehalten. / All rights reserved. Saarbrücken 2016

## A Case Study: Working Swot of Self Instructional Material of Technical Programme

## **Table of Contents**

## **Page Numbers**

1. Introduction	2
2. Design of the Study	18
3. Data Interpretation, Result and Discussion	20
4. Summary, Conclusions and Suggestions	42
5. Bibliography	54

#### 1. Introduction

#### 1.1 Background

Education is for all human being for the building of life. When education is limited to select minorities or elites, it ensures the durability of their own status but more than this it ensures their dominance over economic and political forces and over the social classes upon which those forces rely. At times, the influence of education in the development and revolutionary processes that have shaped human history has been invisible or hardly noticeable, but it has always been present. The strength of that influence is the reason why every regional, national and global efforts shall be done to bring about social justice must be performed within the area of education (YCMOU1998).

Through education, it would be possible to achieve various goals. Education would raise the cultural level and the comprehensive capacity of people and stimulate in them the desire for growth. Education would provide the knowledge and skills necessary to qualify at various levels to carry out functions personnel related to social development and production of wealth. In the areas of science, technology and culture higher education would allow people to increase their understanding of the universe, nature and human experience. Education will also lay a base for just social equilibrium.

Today education is driven by scientific advancement and by the requirements of a fast growing population whose needs are increasing daily, whose problems are becoming more obvious and strongly felt and whose search for solutions is becoming more urgent. This current stage points to several changes in the structure and goals of education.

Education is no longer merely a means of transmitting traditional values and models of already existing social structures. Increasingly, it is becoming an agent of social change now promoting new knowledge, new values and new ways of improving the human conditions.

Education has ceased to be an exclusive domain of minorities of select persons. Its doors are now open to the all range of masses in countries throughout the world. This open door policy has also helped to improve the status of women. Education has begun to play a leading role in liberating women from prejudicial and oppressive traditions. By providing opportunities for women to qualify for all positions, education is beginning to combat forces that retard not only the development of women but also the development of society as a whole.

Education has also begun to reject the idea that learning as an appropriate activity while human beings are in their chrysalis stage but not after they have reached a state of maturity. In the past dedication to study was viewed as a worthy quality during childhood and youth but it has expected to be abandoned during adulthood in favor of dedication to work. Education is no longer viewed as a means of preparing people for jobs or professions. Today we recognize that the learning is lifelong process.

Teaching and learning activities are no longer centered exclusively on what is termed as formal education programme of the study within school system and they are no longer restricted to classroom situations.

Throughout the world various regions and countries are taking a close look at the structures, content and methods of education and the pressure for change is mounting the requirements of conventional education modes, based on face to face contact between teachers and students and the need for classroom, library and laboratory facilities limit the advancement of education. It is therefore, necessary to apply the new modes that will increase the effectiveness and at the same time reduce the cost of education. For all of that Distance education offers promising solutions. Open or distance education originates from the need to extend learning opportunities at various level to people who do not have access to traditional modes for various reasons for example, economic and time restrictions related to job and family responsibilities or distance from educational centers. It is based on the concept of learning as a continuing or lifelong process that provides ongoing cultural and professional development, increases technical skills and encourages the general public to keep abreast of current topics as well as scientific and technological advancements.

Learning by correspondence represents the first stage of distance education. In comparison with traditional formal education, it was considered second rate, an opinion that prevailed until 1950s. A second stage emerged at the World War II, with the growing use of the telephone and radio. Education by radio offered a complement to correspondence learning as well as an auxiliary mode of education in general especially for the rural populations, Distance education entered the third stage with television which added a powerful and attractive audio visual dimension to learning. In its fourth and present stage, distance education has acquired a seemingly limitless capacity for growth. The computer, with its astonishing ability to store, retrieve and process a vast repertoire of information is taking education beyond all previously conceived limits of time and space.

#### 1.2 Distance Education in the world

Distance education has created a new dynamic in the history of education. It has grown in the world under the most varied forms. In its diversity are reflected through the difference of political philosophies from country to country, availability of new communication methods, the world economic turbulences and in certain cases, the imprint of certain outstanding individuals.

In the world, the first open university was established at Milton Keynes, U. K. in 1069 Lord Perry, the founder of the first open University in U. K. pointed out the essential efforts of political parties in creation of distance education. Thereafter, open universities were started in various countries in Asia and Europe.

In case of underdeveloped and third world countries distance education has offered a greatest hope for development because of its capacity for educational innovations for reaching wide audiences at various educational levels and for providing learning opportunities at costs that are lower than traditional forms. Unrestricted by the limits of traditional methods, distance education has been successful in responding to increasing educational needs of people of all ages, in all sectors of the society.

#### 1.3 Distance Education in India

Distance education programmes were initiated in India in 1962. Mainly with the objective of to reduce pressures on the conventional universities and also to provide opportunities for employed persons to pursue education.

In 1962, the U. G. C. offered considerable deliberations to the recommendations of Kothari Committee and suggested to Delhi University to launch correspondence courses at undergraduate level. The response to these courses was encouraging. It opened opportunities to dropouts, adults, working people and persons in remote areas particularly women and various another groups who could not have otherwise gone for higher education. The Ministry of education and U. G. C. therefore decided this non-formal system of education and suggested to the conventional universities to introduce correspondence courses to widen access to education for different sections of society.

The greatest snags in correspondence courses were that the Correspondence Courses Institutes were tied down to the conventional universities and they had to follow their curricula and examinations. However, a few Vice Chancellors launched some need based and job oriented courses, thus giving some kind of autonomy to these institutes. It was a constructive step to make correspondence courses relevant to the needs of society and their learners. Correspondence courses widened access to tertiary and vocational education. These institutes have enabled large population from various segments of society to get the education they needed.

Thus during 1960s distance education programmes remain restricted to undergraduate programmes, adopting the same syllabi and pattern of examinations that prevailed in conventional universities. During the 1970s, postgraduate programmes were taken up. A new era in distance education was started by the establishment of Andhra Pradesh Open University in 1982 followed by Indira Gandhi National Open University (1985), Dr. B. R. Ambedkar Open University, Hyderabad, Andhra Pradesh (1982) Kota Open University, Kota, Rajasthan (1987), Nalanda Open University, Patna, Bihar(1988), Yashwantrao Chavan Open University, Nashik, Maharashtra (1989),M. P. Bhoj University, Bhopal, Madhyapradesh (1993), and Dr. B. R. Ambedkar Open University, Ahmedabad, Gujrat (1994).

The Distance Education Council (DEC) established in 1992 and presently part of IGNOU is the apex body to lay down academic and professional norms for the Open University system in India.

In the near future India can envisage education through computers, satellite, Internet, web etc. This kind of methodology of imparting education is becoming global which would mean a total revolution in the field of education. In this direction IGNOU has made a good start and state OUs and DEIs can be also make use of such sophisticated media by down linking with the IGNOU, system the British Open University at Milton Keyes through its International Centre for Distance learning (ICDL) is now working on the Internet and Web system, founded by world bank. This will display information about distance and open universities on the Internet Web at the global level.

# 1.4 Yashwantrao Chavan Maharashtra Open University (YCMOU) Nashik

The Yashwantrao Chavan Maharashtra Open University ( YCMOU) was established in 1989 through Act XX (1989) of the Maharashtra State Legislature. The University headquarters at Nashik located 200 kilometers northeast of Mumbai.

The YCMOU, was established with the following objectives.

1)To make, higher vocational and technical education available to large sections of the population.

2)To provide innovative, flexible and open system of education through distance teaching methodology and by applying modern communication technologies to education.

3)To provide continuing adult and extension education with special emphasis on training the adults in new skills to enable them to adjust the changing technological environment.

4)To give special attention to the needs of the disadvantaged/ unprivileged groups, in particular, people in the rural areas and the women.

5)To relate all courses to the developmental needs of individuals, institutions and the state.

6)To provide for the post- graduate studies and research opportunities in all fields of knowledge especially in educational technology, distance education and development communications.

Main features of the University are:

- The goal of the University is to become a "Mass University". The programmes are therefore conceptualised and designed with this goal in sight.
- Most of the programmes are offered in the regional language (Marathi)
- The programmes lay a major emphasis on vocational/technical courses.

- The university is committed to become self sufficient in operational costs.
- The university aims at using the latest techniques and technologies in its task of imparting education.
- The university develops linkages so as to become instrumental in the developmental and transformational processes of the society.
- The university has evolved a work culture in its organization in which accountability rather than authority is the key feature for each post.
- The structure functioning and philosophy of the university is different from the conventional universities. It has relaxed entry rules, flexibility in course combination, flexibility in choosing the place and pace of study, provision of individualised study etc.

#### 1.5 School of Continuing Education

The school of continuing education was established in 1989. This school is committed to provide access to education to all sections of society through relevant courses in non-formal stream. The mission has been to respond to the developmental needs of the society by offering need-based vocational courses to larger and larger segment of population, and in particular to the disadvantaged groups such as those living in remote and rural areas including working people, housewives and other adults who wish to upgrade or acquire knowledge through studies in various fields. Further, it is committed to improve the sensitivity of the students to social issues while improving the standard of living of community itself. The school has been established with the following major objectives-

- To provide need based educational programmes to the practicing workers in different industries to equip the persons with different multiple skills, through a multimedia communication system in the regional language.
- To enable individuals and group in different segment of population to fill up the gaps in their intellectual growth, professional and technical

competence and to develop relevant skills and interest for work, leisure and self employment.

- To enable individuals those in profession and specialised fields the opportunity to keep up with the pace of development of knowledge.
- To study the need of the various sections of society and people with different interests, age, sex, occupations, regions, local conditions etc. and provide need based knowledge and meaningful education programmes in order to secure their effective participation in development process and help to bridge the gap between the educated the uneducated even though they have not completed the formal process of schooling.
- To meet the needs of the ever-expanding universe of knowledge and in understanding and communicating new ideas and techniques.
- To provide courses of general interest so that people become more and more aware of current problems in the contemporary world and are enable to lead a better and fulfilled life and achieve self-sufficiency and to assist in the cultural and intellectual enrichment of community life.
- To develop the programmes on basic education and skills for illiterate men and women.
- To provide vocational training to the rural youth for self- employment.
- To develop and offer courses leading to certificates, diplomas and degrees to people who wish to acquire greater academic and professional competence.
- To formulate different patterns of acquiring education a lifelong and continuing activity.
- To enable people in all walks of life, to extend to the society the benefits of the intellectual leadership and resources available in the University and colleges, and to create awareness about community needs among the faculty members and the students.

The School of Continuing Education has been established to offer continuing education programmes to the learners, particularly

belonging to the disadvantaged classes residing in distant areas, through flexible mode of learning.

The School has developed Certificate in Engineering Vocation programmes in seven trades (Lathe operator, Fitter, Plumber, Mason, Domestic Wireman, Radio-Tape Mechanic, Two wheeler mechanic), which were launched in 1994. The school also developed special short-duration programmes for earth quake affected areas of Latur (in Hand Pump and bicycle repairing, building low-cost houses resistant to earth quake) in 1994.

The programmes of the school are used in the training of various strata of the disadvantaged groups, through TRYSEM scheme, schemes under nuclear budget of the Tribal Welfare Department, and so forth.

In 1998, the school launched a Certificate programme in Industrial Painting keeping in mind the specific problem of the automobile industries, with active co-operation of the automobile giant TELCO. The learners passing through the programme were absorbed in the TELCO.

In 2006, the school launched Diploma for Electrician and Domestic Appliances Maintenance. This programme has caught up since and catering to the long-felt need of professional training in the area of electrician skills.

### Structure of Diploma for Electrician and Domestic Appliances Maintenance (DEDAM)

The consolidated structure of the Diploma for Electrician and Domestic Appliances Maintenance is described as follows;

The duration of the programme is one year. The programme consists of two theory courses each of 8 credit point and two practical courses each of 8 credit points. The total credit points of the programme are 32. The students are trained in the following courses:

- 1. Electrical, Theory
- 2. Electrical Practical

- 3. Appliances Repair Theory
- 4. Appliances Repair Practical

The minimum qualification of admission for this programme is SSC passed or preparatory course (for degree admission of YCMOU) passed.

**Programme Schedule**: The admission process of the DEDAM programme is carried out during the 1<sup>st</sup> of June to 16<sup>th</sup> of August every year. The study centres have to deliver the duly filled DEDAM admission forms and documents with the fees to the YCM Open University immediately after the last date of admission. The school of continuing education receives the tentative lists of the study centre wise enrolments ten to fifteen days after the last date of the admission to the DEDAM programme. The school of continuing education instructs the stores section of the student services division for the dispatch of the study material in next 2-3 days. The counselling session starts in the month of September every year.

#### 1.8 Significance of the problem

YCMOU is the first Open University in India who launched a programme in this area with an up-to-the-minute content. The DEDAM programme, being a unique programme of its kind and is designed to provide the technical skills, it is needed to study in greater details to enhance the quality of content and implementation. With this view the research has been carried out.

The opinions and views of learners can play a critical role in evaluating the programme. This information can be highly instructive and may focus on:

- Perception of the learners about this programme
- Necessary modifications in the course curriculum, course structure and the course material

Deciding all enlisted points in the mind feedback analysis of the programme "Diploma for Electrician and Domestic Appliances Maintenance" have been carried out, in the perception of students.

- To evaluate various academic student support services involved in Diploma in Electrical Domestic Appliances and Maintenance programme implementation.
- To assess the appropriateness of the study material of Diploma in Electrical Domestic Appliances and Maintenance programme implementation
- **3)** To measure the employability of the student of Diploma in Electric Appliances and Maintenance Programme.

#### 1.9 Scope of the study

The present study is undertaken at the active study centres (where the enrolment is occurred during the duration of study) in Nashik. Minimum 40 feedbacks will be collected for the study.

#### 1.10 Limitations of the Study

As this study is based on the views of the learners (students), mentioned in the questionnaire following are the limitations for this study:

- The views, opinions and biases of only the responding learners (students), are reflected in the study.
- Those who did not respond to the queries may have had more to contribute. Such cases are beyond the scope of the present study.
- The data is based on opinions, which are psychological responses and may not be objective.
- Correlation of the responses by the learners with other sources of data like evidence of book delivery by stores, examination results, enrolments is not within the scope of the present study.

#### 1.11 Terminology Used

- Distance Education: Distance education refers to the mode of imparting education to learner where there is a physical separation of the teacher and learner.
- 2) **Open Education**: Refers to the philosophy of education where there is more flexibility for admission, age, curriculum, examination etc.

- 3) Correspondence education: Refers to the traditional type of education given mainly through printed material by postal system. The difference between correspondence education and distance education is characterised essentially by the advanced strategies and technologies of communication used in distance education.
- Communication: The process through which a new idea reaches to its potential user.
- 5) Adoption: It is the process through which individual passes from the time he becomes aware of an innovation to its ultimate use.
- Co-ordinator: a senior academician who is responsible for smooth functioning of the centre heads the study centre.
- Respondent: The learner or student who responds the questionnaire, in the distance education system.
- 8) DEDAM programme: It is the programme developed and implemented by School of Continuing Education, YCMOU, Nashik, Maharashtra. In detail it is known as Diploma for Electrician and Domestic Appliances Maintenance.
- YCMOU: Yashwantrao Chavan Maharashtra Open University is located at the city, Nashik in Maharashtra, India
- 10) Programme Evaluation: The holistic process of evaluation of an academic programme with a view to improve the quality of instruction and implementation.
- Maintenance: This is in connection with the electric maintenance work.
- 12) Academic Programme: A collection of correlated courses, which one must complete successfully in order to earn a certification by the university. Certification may be by certificate, diploma, graduate degree, postgraduate degree or doctoral degree.
- 13) Course: An individual component of an academic programme (sometimes loosely called as subjects) which one has to successfully complete, in order to complete the programme. Courses may be of

different types like theory, practical or project work. Each course is given a course code.

- 14) Credit Point: The number of study hours, in multiples of 30-35 clock hours, which an average learner has to devote for effective learning. For 1 CP, a learner has to devote 30-35 clock hours to complete the study of the course. Study includes several activities like reading the book, taking notes, solving problems, undergoing tests, performing experiments in laboratories, thinking, etc.
- 15) **Self Instructional Material:** The print material, which is specially, designed for the Open University students. These books are written in a manner so that the students should be able to understand the subject matter even in the absence of a teacher. Some times this material is adopted from outside publication if that closely matches the distance education style.
- 16) Counseling Sessions: sessions conducted at study centre, during which a qualified person gives explanations to help clear doubts/difficulties of the student. During counseling session, student also performs practical activities like experiments or project work in study centre laboratory.
- 17) Counselor: a qualified person at SC, who conducts counseling sessions and helps the students in their doubts / difficulties. He / she also helps student to perform practical activities like experiments in a study centre laboratory.
- 18) Study Centre: a place where the students attend the counseling sessions and get other relevant services like delivery of self instructional books, admission, examination and communication with university head office.
- 19) Programme Coordinator: a person in charge of the administrative and academic affairs at the study centre. He/she plans the availability of counselors, looks after the distribution of self-instructional materials, arranges and co-ordinates counseling sessions, etc.

- 20) Study Centre Head: The head of the study centre that is normally the principal of the institution, where study centre is located. He / She may not participate in the day to day activities of the study centre, but will take active role in case of any serious problem at the study centre
- 21) Quality: It is the totality of features, as perceived by the customer, about any product or service. The term is used to convey an assurance of satisfactory service or product in areas of both management studies, the term quality is conceptualized from two discernible approaches. One based on quality standard and other based on client satisfaction criterion. The term quality here is defined as compliance with a given standard or approximation.
- 22) Relevance of course: It is a psychological parameter, which expresses the degree of closeness of a course with the skill sets to be actually employed by a professional.
- 23) Effectiveness: Effectiveness of communication means the degree of success to transform the knowledge to receiver end from sender end through the medium used. This will be the effectiveness of that medium used.
- 24) Stakeholders: Stakeholders are the individuals who can question about the products or services offered to them, to the provider. In context of the study three stakeholders are identified as: 1. Students mean the learners 2. Counselors 3.Study Centre coordinators
- 25) Quality Assurance: Quality assurance can simply be defined as measures taken to avoid faults, as the set of activities undertaken to ensure that standards are, first, specified clearly and second, reached consistently for all activities in which an institution engages.
- 26) **Appropriateness:** This term is referred as a psychological response from the respondents for the concerned questions.
- 27) Active study centre: The study centre where the student enrolment has occurred during the study duration, from where the sample is collected.

#### 1.12 Assumptions behind the Problem

. Hence it is assumed that the feedbacks from the different students would not differ much more.

#### 1.13 Justification for the Problem

Considering the societal need, the School of Continuing Education of the YCMOU launched Diploma for Electrician and Domestic Appliances Maintenance in 2006. This programme is technical/ vocational skill oriented in nature. Hence important in the employment generation point of view and even created the selfemployment while learning also. This is a pioneering and unique programme at the time. YCMOU is the first Open University in India who has launched DEDAM programme In distance education system learner is not in continuous contact with his /her teacher. Hence to execute learning by the learner various modes of communications are utilized. This involves practical counseling, theory counseling, selflearning books and CDs. While using these modes by the learners and implementing the programme by the university, many problems have to be faced on both sides ie sender and receiver in a communication cycle. As DEDAM programme is playing the role in generation self employment, it is very much important to evaluate this programme, for maintaining as per the futures need and to remove the hurdles in communication process of the programme. Effectiveness of any new programme cannot be fully studied or measured unless the various parameters in the operating system are evaluated to exploit all its benefits and problems also.

#### 1.14 Hypothesis of Research

The present research shall be based on the following hypothesis:

1. The learning material provided to the learners in the form of printed books, workbooks serves to fulfill the achievement of the skills in the students of the DEDAM programme.

2. The DEDAM programme is useful for the creation of the employment/self employment.

#### 1.15 Chapter Scheme

This thesis is divided into 8 chapters. The first chapter titled 'Introduction' explains the importance of the study. The second chapter 'Review of the literature' mentions the survey of related literature. The third chapter is about 'Problem in the Perspective of Communication'. The fourth chapter is about Instructional System of YCMOU''. Fifth chapter 'Design of the study' discusses the research design. The sixth chapter 'Data interpretation, Result and Discussion' emphasizes the analysis and interpretation of data and the results with discussion thereon. The last seventh chapter 'Summary, Conclusions and Suggestions' highlight the brief summary of the whole research, the conclusion and the suggestions.

#### 2. Design of the Study

Research design is a plan, which enables one to reason from observed facts and events to logically sound conclusions. It involves the arrangement of conditions and observations in such a way that alternative answers to the questions taken up in the research are ruled out. It contains a built-in system of checks against all factors that might affect the validity of research out come.

The research is designed to enable the researcher to arrive at valid objective, accurate and economic solution of the given problem as possible. Scientific research starts with a problem for which a provisional answer is suggested in the form of a hypothesis. The purpose of the design is to facilitate a valid test of the hypothesis by bringing to bear upon on the basis of observed facts and events. It also directs a process of observation as it suggests, what facts are relevant to research problem, and how its empirical evidence obtained by researcher with in the minimum cost of time and money and the maximum likely hood of it being accepted by other researchers interested in the given area of research.

The design provides a sort of blueprint for verification of the presented relation among two or more variables as stated in the hypothesis, as to where to look for them and how many observations to make. It also tells us whether the variables of the research are to be manipulated or the selected variables are to be used in the research. The design specifies the method to be employed for manipulating the independent variable and for measuring the dependent variable. It also suggests the way by which the obtained research data is to be analyzed and what type and level of statistical analysis is appropriate in the research situation.

#### 2.1 Sample Selection:

The information regarding the enrolment of the students, their addresses and permanent registration number are obtained from registration centre. The 50 students (learners) at the study centre in Nasik city is used as a sample for the study. It is decided to administer the questionnaire on those 50 respondents in the study, from the study centre located in Nasik. The data is collected through the study center.

#### 2.3 Methodology for the Study

The 65 questionnaires are distributed physically to the DEDAM students at the study centre in Nasik city. There is only one study centre in Nasik. Among 65 questionnaires only 50 questionnaires can be obtained in a fulfilled manner. The data is collected through the fulfilled questionnaires and analysed with the simple percentage method to obtain the results.

#### 2.4 Tools of Analysis

The mixed type of scales is used in the tool development as per the requirement of the items and the need of response. The questionnaire for learners consisted of 46 questions in total. Different questions are asked about the personal and background information of the students (11 questions), the study material and allied academic services (32 questions) and about employability of the programme (3 questions)

#### 2.5 Research Design

A survey process is used.

#### 2.6 Statistical treatment of Data

The data generated during the study is processed with simple percentage method. The researcher is more interested in evaluating the study material of the DEDAM programme in the perception of the students ie learners.

#### 3. Data Interpretation, Result and Discussion

The data is obtained through the feedbacks and analyzed. Then, the analyzed data is presented with interpretations. The interpretations are followed by the discussions. The following section presents the results obtained from the duly completed questionnaires from 50 Students of Diploma for Electrician and Domestic Appliances Maintenance programme at the study center in Nashik.

In the present study, the simple percentages are calculated and interpreted. The table of actual values and percent values are presented in Tables.

#### 3.1 :Demographic information of the students:

Table No 1: Gender

Sr.No.	Number of students	Percentage
Male	50	100 %
Female	00	00 %

From the data in table 1 it is reported that 100% of the respondents in the study are male. As the DEDAM programme is related to various maintenance services in electrical wiring and various appliances, hence it involves the risk. The male students might be more interested in such kind of jobs.

Table No 2: Marital Status

	Number of	
Sr.No.	respondents	Percentage
Married	12	24%
Unmarried	37	74%

From the data in table no 2 it is seen that 24% of the respondents are married and 74% are unmarried. Majority of the students are unmarried that is fresher's and trying to gain the skill based programmes for the earning required for the life.

Table No 3: Age Group

	Number of	
Sr.No.	respondents	Percentage
16 to 25 Yrs	33	68 %
26 to 35 Yrs	14	28 %
36 to 45 Yrs	3	4 %
Above 45 years	0	0%

From the table no 3 it is reported that majority of the respondents are from the 16 to 25 years age group, 28% respondents are from 26 to 35 years age group. This represents that the programme is opt in majority by the youths.

Table No 4: Rural or Urban

Sr.No.	Number of respondents	Percentage
Rural Area	38 Candidates	76 %
Urban Area	12 Candidates	24 %

Data in table no 4 reported that 76% ie majority of the respondents are from rural area. The DEDAM programme is skill based programme. It inculcates the technical skills in the respondents which the students can use for gaining the self employment. Such kind of the needs occurs mostly in rural areas hence rural respondents are more for this programme.

Table No 5: Eligibility at admission to program

		Number	of	
Sr. No.		respondents		Percentage
SSC Passed		23		46 %
Preparatory	Exam	27		54 %
Passed				

One can take the admission to this programme after the completion of SSC or passing the preparatory examination of YCMOU. Data in Table no 5 reported that majority of the students became eligible for the admission to this programme after passing the preparatory examination of the YCMOU. The student who cannot complete SSC examination by some or other reasons and wish to learn, usually opt

the preparatory examination and becomes eligible for the admission to YCMOU diploma. This reports that the main cause for which university designs such kind of programmes is fulfilled. The society is advantaged with the education of YCMOU.

	Number of	
Sr. No.	respondents	Percentage
For getting more	22	44 %
knowledge in this field		
For getting the job	6	12 %
For increasing the	20	40 %
educational status		
For the Promotion in	2	4 %
Service		
To change the job	0	0%

Table No 6: The Purpose behind taking the admission to the Program.

From the data in table number 6, it is revealed that majority that is 44% of the respondents opted this DEDAM programme for getting more knowledge in this field, 12% opted to get the job, 40% opted to increase their educational status and 4% opted to get the promotion in their existing service where they are employed.

	Number of	
Sr. No.	respondents	Percentage
No Gap	49	98 %
1 to 3 yrs	1	2 %
4 to 6 years	0	0%
7 to 10 years	0	0%
More than 10 years	0	0%

Table No 7: Gap between previous education and present education

From the data in Table No 7 it is reported that 98% ie majority of the respondents entered into this programme has joined just after completing the required eligibility qualifications and are fresh students in the system. This shows the interest of young generation in the skill

based programme. Only 2% of the students joined the programme after some gap in the education.

	Number of	
Sr.No.	respondents	Percentage
Article in newspaper	0	0%
Friends	18	36 %
Advertisement in	2	4 %
newspaper		
Any another source	1	2 %
Regional Center	1	2 %
Study Center	28	56 %

Table No 8: Sources of information about the DEDAM programme

YCMOU publish the advertisement of the programmes through the newspapers at the starting of academic year. This advertisement is published collectively for many programmes at a time. From the data in table 8 it is reported that 36% respondents obtained the information of DEDAM programme through their friends, 4% obtained through the newspaper, 2% received from the regional centers and majority ie 56% of the students received the details of programme from the study center. The study centers are the important part of YCMOU which plays the role of dissemination of knowledge very effectively and helps YCMOU for the fulfillment of its objectives. The knowledge is spread to the society.

	Number of	
Sr. No.	respondents	Percentage
Service	21	42%
Housewife	0	%
Student	25	50%
Farmer	0	%
Business	0	%

Table No 9: Occupation of the respondent

Consultation	0	%
Any Other	4	8%

The data in table no 9 reported that 42% of the respondents are learning this programme while working for the employers. 50% respondents are the students means are focusing only on the study of DEDAM programme only. 8% of the students have not reported any information about their present status at present.

#### 3.2: Self Study material

Table No10: Time of Study Material Receipt

	Number of	
Sr.No.	respondents	Percentage
Before the contact		
session	0	0%
At the time of first	49	98 %
contact session		
No Info.	1	2 %

In distance education system the delivery of study material at right time is the main and important issue. The students are learning at distance and many of the time at remote places so the delivery of the study material becomes the critical issue. In this regard it is seen that 98% of the respondents that is students could receive the study material in the first contact session after the admissions. Table No 9 shows that the students must be satisfied with this service from the university. Second important thing is that the study center also must be efficient and keeping the follow up with the university for the various services to be received and in favor of the students.

Table No 11: Appropriateness of the study material for the smooth understanding.

	Number o	of	
Sr.No.	respondents		Percentage
Some extent	1		2 %
Yes	49		98 %

No	0	0%

The content of the DEDAM programme is designed to provide the knowledge of repairing the various electrical wirings, circuits, domestic appliances like washing machines, mixtures and geysers etc. The complete technical knowledge is provided through the electrical theory and practical courses.

The data in table no 10 revealed that 98% of the respondents are satisfied with the study material and could understand the concepts with self study. They reported that the study material is appropriate for the self learning ie self study. This data proves that the study material is correctly developed and serving the purpose for which it is developed.

Table No 12: Opinions about the appropriateness of the self study material (books) of the DEDAM programme

Opinion	Electrical	Electrical	Appliances	Appliances
	Theory	Practical	Repair,	Repair
	course	Course	Theory	Practical
			Course	course
Excellent	0%	0%	0%	0%
Very Good	96%	96%	97%	97%
Good	4%	4%	3%	3%
Satisfactory	0%	0%	0%	0%
Bad	0%	0%	0%	0%

Diploma for Electrician and Domestic Appliances programme consists of 4 courses. Among them 2 are theory courses and 2 are practical course. The self study material is provided to learn the programme. Table no 12 reports the opinions of the respondents about the various courses of DEDAM programme. The data revealed that around 96% of the students felt the self study material of electrical theory and practical courses as very good. 97% of the respondents reported the self study material of appliances repair theory and practical courses as very good. From the data it is noted that majority of the students of DEDAM programme are satisfied with the self study material of DEDAM programme. YCMOU has the mission to cater the skill needs of various strata of the society. This need is being catered through the DEDAM programme and the study material.

 Table No 13: Opinion about the various aspects of the self study

 material

 Aspects

 Excellent

 Very

 Good

 OK

Aspects	Excellent	Very	Good	OK	Bad
		Good			
Framework of the	0%	1%	99%	0%	0%
chapters through the					
syllabus					
Language of the	0%	100%	0%	0%	0%
examples in the					
study material					
Explanations and the	0%	98%	2%	0%	0%
examples in the					
study material					
Overall opinion	0%	100%	0%	0%	0%
about the study					
material					

Table no 13 reported the data about the various aspects of the self study material. The opinions are ranged in excellent, very good, good, ok and bad options. The data revealed that majority ie 99% of the respondents found the framework of the chapters in the syllabus as good. 100% of the respondents found the self study material as very good in concern with the language of the study material and proper to understand. 98% of the respondents found the self study material as very good about the explanations and the examples provided in the study material. 100% of the respondents found the self study material as very good in overall opinion. The self study material can be revised after certain intervals to make it perfect ie excellent.

Table No 14: Do the self test questions related to the content and the objective of the content?

Sr. No.	Number of respondents	Percentage
Yes	50	100 %
No	00	0 %

The data in table no 14 showed that 100% of the respondents found the self test questions mentioned in the self study material related to the content of DEDAM programme and as per the objective mentioned at the start of every unit, in the syllabus ie content of the programme.

Table No 15: Do you attempt to solve the questions in the study material?

Sr. No.	Number of respondents	Percentage
Yes	50	100 %
No	00	0 %

Distance education system mainly follows the philosophy that the students have to learn more through the self study material and should depend less on the study centers or counseling sessions. Considering this requirement the books are developed in the self study format. These books consists the self test questions which are solved by the students. The data provide the feedback to the students that actually they learnt after the reading of the books. The data in table no 15 showed that 100% of the students could understand the content of the self study books and could solve the self test questions successfully.

Table No 16: Various ways of attempting the self test questions at the end of the chapter

Sr. No.	Number of respondents	Percentage
After attending the	49	98 %
counseling session		
After reading the	1	2 %
whole chapter on		
your own		

DEDAM programme is implemented through the various study centers located at various places in Maharashtra. Distance education system does not insist on regular teaching. Still then practical sessions require the physical attendance and the hands on practice for the skill acquirement.

Table No 19: How much it helps to understand the content after solving the question at the end of each chapter?

Sr. No.	Number of respondents	Percentage
To large extent	2	4%
To moderate extent	46	92%
To Some extent	2	4%
Very Less	0	0%
Not at all	0	0%

The distance education system expects from the students that they should read the books prior attending the counseling sessions. The student has to go the study center just for performing practicals and to attend counseling sessions, for getting the solution to his/her academic problems. Usually the students attempt the questions in the self study material. From the score which he/she could achieve after solving the question, he/she comes to know that does he/she understand the concept of the self study material and could he gain the knowledge. Data in table no 19 reported that majority of the student found the self test questions helpful to understand the content after solving the question at the end of each chapter. Very few found the questions at the end of chapter helpful to some extent.

Table No 20: Appropriateness of the number and content of the self study material to the syllabus of the program

Sr. No.	Number of respondents	Percentage
Yes	48	96 %
No	2	4 %

From the data in table no 20 it is reported that majority that is 96% of the respondents reported that the number of self study books provided

for the programme and the content of it is appropriate as per the syllabus of the programme.

Table No 21: Opinion about the difficulty level of the self study material of all courses

Name of the course	Easy to understand	Difficult to understand
Electrical Theory	96%	4%
Electrical Practical	96%	4%
Appliances Theory	96%	4%
Appliances Practical	100%	0%

The data obtained through the questionnaires is mentioned in the table 21. It revealed that majority that is 96% of the respondents found the electrical theory and practical courses as easy to understand and to learn. 96% respondents found Appliances theory course as easy to understand and 100% respondents found the appliances practical course as easy to understand. As overall from the data it is seen that the courses in the programmes are properly designed with suitable syllabus and supported with the appropriate self study books. As a whole the students found the programme as easy to understand. This makes them happy and they could acquire the technical skills nicely in easier manner. This is satisfaction of the students as respondents.

Table No	22:	Time	suffic	iency	for	the	practical	work

Sr. No.	Number of respondents	Percentage
Sufficient time	49	98 %
Not sufficient	1	2 %
time		

DEDAM programme is consisting with the content which prepares the manpower who are expert as a technician in electrical wiring and the domestic appliances repairing. Hence this programme has maximum weight age to the practical work to get the hands on practice. Hence through the questionnaire the researcher obtained the data about actual satisfaction of the respondents about the practical activities. 98% of the students reported that they could get the sufficient time for the practical work as mentioned in the programme.

Table No 23: How many hours are the allotted for the practicals in a week?

Sr. No.	Number of	Percentage
	respondents	
12 hrs	47	94 %
10 hrs	2	4 %
8 hrs	1	2 %

From the table no 23, it is reported that majority that is 94% of the respondents could get the 12 hours practical sessions which are maximum hours. In rest of the cases the students could not have attended all practical sessions.

Table No 24: The quality of teaching at the study centre.

Sr. No.	Number of	Percentage
	respondents	
Excellent	9	18 %
Very Good	3	6 %
Good	38	76 %
Ok	0	0%
Bad	0	0%

Table No 25: How the incomplete practicals due to power failure are completed by the counselors?

Sr. No.	Number of	Percentage
	respondents	
Incomplete Practicals are	0%	05
not covered at all		
Counselors only explain	0%	0%
about the incomplete		
practicals		
Incomplete practical are	50	100 %
covered later on		

DEDAM is a programme based on the electrical field. Majority part is based on the practical activities. This requires the electricity continuously. Without electricity the activities defined in the electrical practical and appliances repair courses cannot be performed. The study center is located in the Nashik region where the respondents belong. In Nashik , the power cut occurs some times. The study center tries to complete the practicals usually in the regular working hours. From the data of table no 25, it is seen that all students received the repeat practical sessions whenever they missed due to power failure. Table No 26: Level of knowledge addition through the practicals

Sr.No.	Number of	Percentage
	respondents	
To large extent	1	2%
To moderate extent	48	96 %
To some extent	1	2%
Very less	0	0%
Not at all	0	0%

DEDAM programme is designed to produce the manpower required as an electric technicians ie electricians. Such manpower must be empowered with the practical knowledge. The student should be perfect in their knowledge. Perfection requires continuous practice. Study centers of DEDAM programme usually performs the practicals as mentioned in the programme. Each and every student grasp and aquire the technical knowledge according to their own abilities. From the data in table 26, it is reported that majority ie 96% of the respondents (students) agreed that practicals add the knowledge up to moderate extent which is helpful for the students.

Table No 27: Which of the following practical courses need the additional practical workbook?

A) Practical Course 1: Electrical Practical

Sr. No.	Number of	Percentage
	respondents	

Yes	46	92 %
No	4	8%
B) Practical Course 2	· Appliances Penair Practica	1

B) Practical Course 2: Appliances Repair Practical

Sr. No.	Number of	Percentage
	respondents	
Yes	5	10 %
No	45	90%

DEDAM programme is supported with the self study material which covers 100% of the theory part and 70% of the practical part. 30% of the practical part is as per the modern domestic appliances repair. Those 30% practical course developments might be required by the students. From the data in table no 27 A and B it is reported that majority that is 92% students are satisfied with the self study material available for the practical activities. 90% students are satisfied with the self study material available for appliances repair practical course. As mentioned earlier 30% remaining support study material for the both practical courses should be developed to provide the students.

## 3.3: About Employability of the programme

Table No 28: Do you think that the knowledge gained through the learning of DEDAM will help you in your job/work/profession/or in self employment?

Sr. No.	Number of	Percentage
	respondents	
Yes	50	100 %
No	0	0%

DEDAM programme is designed to empower the students for the self employment. The knowledge gained through the programme is useful for the job and even for the self employment also. The data in table no 28 showed that 100% of the respondents have the opinion that the knowledge gained through this programme is going to help them in their regular job/work/profession or self employment.

Table No 29: At present, do you work somewhere on the task related to DEDAM programme ?

Sr. No.	Number of respondents	Percentage
Yes	33 Candidates	66 %
No	17 Candidates	34 %

From the data in table no 29 it is reported that 66% of the respondents are working somewhere and doing the tasks related to the knowledge gained through DEDAM programme.

Table No 30: If you are working at present then how much do you earn per month? (Among 33 students)

Sr. No.	Number of	Percentage
	respondents	
Rs.10,000 per month	10 Candidates	30 %
Rs.7,000 per month	11 Candidates	33 %
Rs.5,000 per month	8 Candidates	24 %
More than Rs.10,000 per month	4 Candidates	13 %
No Info.	0	0%

The DEDAM programme mainly aims to induce the technical skills in fresh students who do not know at all and to strengthen the skills who are already working and doing the basic jobs related to electrical appliances repairing. The students are expected to use the knowledge gained through DEDAM programme for the earning required for their life. With reference to this, the data from the student respondents is collected and it is found that 33 students are already working in the field related to the programme. Among 33 respondents 30% are earning Rs 10000/- per month, 33% earning Rs 7000/- per month and 24% earning 5000/- per month. There are 13% students who are earning more than 10000/- per month. From the data it is clear that all 33 student respondents are earning minimum expected and the knowledge obtained through the learning of DEDAM programme is useful for the employment and for the self employment also.

#### 3.4: Counseling Sessions

Table No 31: Do you attend all counseling sessions at the study center?

Sr. No.	Number of respondents	Percentage
Yes	48 Candidates	96%
No	2 Candidates	4%

The data in table no 31 showed that majority of the candidates attended all of the counseling sessions at the study center. This shows that the student respondents are interested in learning of the DADAM programme. This represents that the study center also organized the counseling sessions properly involving the good teachers.

If the answer to the question in table no 31 is" no" then please provide your opinion

Sr. No.	Number of	Percentage
	respondents	
Counseling sessions are not	0	0%
conducted regularly as per		
schedule		
All courses are easy for self study	0	0%
Quality of counseling is not	0	0%
appropriate for the students		
understanding		
The counselors do not explain the	0	0%
doubts of the students		
Due to personal reasons many	2	4 %
time I cannot attend the		
sessions		

From the above information it is reported that only 4% of the students could not attend the counseling sessions regularly because they have their own problems and the personal reasons.

Table No 32: Which of the following motivation occurred for attending the counseling sessions?

Sr. No.	Number of	Percentage
	respondents	
No other source for learning	0 candidates	0%
The topics which are not	50 Candidates	100 %
understandable by self study are		
explained by the counselors		
Counselors explain other	50 Candidates	100 %
related topics also		
New information gets through	48 Candidates	96 %
the discussions		

From the data in table no 32 it is reported that, the researcher attempted to get the feedback about the various students motivations for the learning of DEDAM programme. It is found that 100% of the students respondents are motivated to learn DEDAM through the counseling sessions because the topics which are not understandable by self study are explained by the counselors and they also explain other topics in the relevant field. This information kept the student updated with the information related to DEDAM programme. 96% respondents found that they received new information through the discussions at the study center in the counseling sessions.

Sr. No.	Number of respondents	Percentage
In the small groups	42	84 %
At a time for all students	8	16%
just the teachers		
performed and showed to		
the students		

Table No 33: How the practicals are organized at the Study Center?

From the data in table no 33 it is reported that the study centers usually plan the practical activities in the small groups for the better understanding of the concepts. The regular time table is followed in the small groups but if some of the students miss the practicals sessions because of their own reasons then the study center might be showing the practical activity performance by the teachers. So that though some of the students cannot attend the practicals still there will not be any academic loss of them.

Table no 34: Do the counselors conduct each counseling session for the two hours duration?

Sr. No.	Number of respondents	Percentage
Yes	50	100 %
No	0	0%

In distance education system only the hours of study are defined. The study centers can plan and deliver the counseling sessions for the required hours as per the convenience of the students and the study centers. From the data in table no 34, it is reported that the respondents are from the single study center hence the schedule was uniform to all students. All of the respondent students reported that each counseling session is conducted for the 2 hours duration.

If the answer to above question is yes then how many times the counseling sessions conducted?

Sr. No.	Number of respondents	Percentage
Always	50	100 %
Many times	0%	0%
Some times	0%	0%
Never	0%	0%

From the above table, it is reported that the study center is following the practice of two hours counseling sessions each and every time. The study center might have prepared the timetable of counseling sessions which consists of two hours counseling sessions. All of the respondents have reported the same.

Table No 35: When do you get the time table of counseling sessions?

Sr. No.	Number of respondents	Percentage
Before the counseling	0	0%
sessions		
At the time of first	50	100 %
counseling session		

The time table for every	0	0%
next week is provided in		
every previous week		
After the enquiry the	0	0%
time-table is provided		
Not at all provided	0	0%

The students of the DEDAM programme are young students usually who join the programme after the completion of SSC or doing preparatory programme. They are less aware about the different procedures and processes of the programme. Hence the study center takes care that each and every student must be informed. The study center calls all students together after the admission process completion that is first counseling session. That time the study center provides various instructions and the time table of the counseling sessions to all students in person. All of the respondent students have reported the same. The same data appears in the table no 35.

Table No 36: Do the counseling sessions are conducted according the timetable?

Sr. No.	Number of respondents	Percentage
Yes	50	100 %
To some extent	0	0%
No	0	0%

From the data in table no 36 it is reported that the concerned study center where the respondents are studying conduct the counseling sessions as per the time-table strictly. All respondent students have confirmed this.

Table No 37: Which are the reasons for non conduct of the counseling session?

Sr. No.	Number of	Percentage
	respondents	
Counselors were absent	0	0 %
No of present students were	0	0%

very low		
The timetable was not properly	0	0%
scheduled according to the		
convenience of the student		
Any other reason	0	0 %

From the table no 37, it is reported that as the study center conduct all counseling sessions as per timetable students have not reported any of the reason for non-conduct of the counseling sessions.

Table No 38 : Do sufficient counseling sessions organized for all courses in DEDAM programme?

Sr. No.	Number of respondents	Percentage
Yes	48	96 %
No	0	0%
Not answered	2	4 %

From the table no 38, it is reported that majority ie 96% of the respondents found that the sufficient counseling sessions are organized as per the requirement of the courses, at their study center. If the answer to above question is no then please write the required number of counseling sessions according to your opinion.

Sr. No.	Number of	Percentage
	respondents	
Counseling sessions for all	0	0 %
theory courses in the		
programme		
Counseling sessions for all	0	0%
practical courses in the		
programme		

From the data in table no 38, it is reported that the study center has the practice to conduct appropriate counseling sessions for theory and practical courses and hence no student has given separate requirement of the counseling sessions at the study center.

Table No 39: Quality of the counseling session at the study center

Sr. No.	Number of respondents	Percentage
Excellent	2	4%
Very Good	47	94 %
Good	1	2%
OK	0	0%
Boring	0	0%

From the data in table no 39, it is reported that majority of the respondents that is 94% found the quality of counseling sessions as very good. This shows that the counselors at the study centers must be of appropriate qualifications and enough experienced for the teaching of the programme. The students also found satisfied with the learning from the teachers available at the study centers.

Table No 40: Do you read the self study books before attending the counseling session?

Sr. No.	Number of respondents	Percentage
Yes	44	88 %
No	6	12%

From the data in table no 40, it is seen that 88% of the respondents that is majority of the respondents follow the practice of reading the books prior attending the counseling sessions at the study center.

Table No 41: The way of conduct of counseling sessions at the study center

Sr. No.	Number of	Percentage
	respondents	
Through the discussion	50	100 %
Asking questions and doubts	50	100 %
Personal guidance	50	100 %
Reading the books	0	0%
Discussions in the small groups	50	100 %
By giving notes	0	0%

The study material of the DEDAM programme is developed in very simple and understandable way. Still then due to the technical nature

of programme the student need to be introduced with the new equipments, instruments, appliances and different techniques of repairing. For this the physical attendance of the respondents is must at the study center. The teachers have to adopt various ways and techniques to clear the basic concepts of the DEDAM programme. From the table no 41, it is seen that various ways like discussion, question answer sessions, personal guidance wherever and whenever required and sometimes seating in a small group the teaching learning process is completed. All of the students noted the same.

Table No 42: How much do your expectations fulfilled from the counseling sessions?

Sr. No.	Number of respondents	Percentage
Fulfilled completely	47	94 %
To some extent	3	6 %
Not at all	0	0%

From the data in table no 42, it is reported that 94% of the respondents are completely satisfied with the counseling sessions and their academic expectations are fulfilled.

Table No 43: Do you get the satisfactory information regarding the program at study center?

Sr. No.	Number of respondents	Percentage
Yes	50	100 %
No	0	0%

From the data in table no 43, it is seen that all of the student could get the satisfactory information regarding the DEDAM programme at the study center.

Table No 44: Do the non teaching staff at study center co-operates you?

Sr. No.	Number of respondents	Percentage
Yes	50	100 %
No	0	0%

From the data in table no 44, it is seen that all of the student respondents found the other services at the study center as satisfactory. The non teaching staff co-operates the students.

## 4. Summary, Conclusions and Suggestions

Diploma for Electrician and Domestic Appliances Maintenance programme is launched in 2006 by YCMOU. This programme has caught up since and catering to the long-felt need of professional training in the area of electrician skills. It is a programme of one year duration. DEDAM consists of two theory courses and two practical courses. The minimum qualification of admission for this programme is SSC passed or preparatory course (for degree admission of YCMOU) passed. The total credit points of the programme are 32. The courses of the programme are:

- 1. Electrical, Theory
- 2. Electrical Practical
- 3. Appliances Repair Theory
- 4. Appliances Repair Practical

YCMOU is the first Open University in India who launched a programme in this area with an up-to-the-minute content. The DEDAM programme, being a unique programme of its kind and is designed to provide the technical skills, it is needed to study in greater details to enhance the quality of content and its delivery. With this view the research has been carried out.

The opinions and views of learners can play a critical role in evaluating the programme. This information can be highly instructive and may focus on:

- Perception of the learners about this programme
- Necessary modifications in the course curriculum, course structure and the course material

Deciding all enlisted points in the mind feedback analysis of the programme "Diploma for Electrician and Domestic Appliances Maintenance" have been carried out, in the perception of students.

 To evaluate various academic student support services involved in Diploma in Electrical Domestic Appliances and Maintenance programme implementation.

- To assess the appropriateness of the study material of Diploma in Electrical Domestic Appliances and Maintenance programme implementation
- **3)** To measure the employability of the student of Diploma in Electric Appliances and Maintenance Programme.

The present study is undertaken at the active study centre (where the enrolment is occurred during the duration of study) in Nashik. Minimum 40 feedbacks will be collected for the study.

#### Limitations of the Study

As this study is based on the views of the learners (students), mentioned in the questionnaire following are the limitations for this study:

- The views, opinions and biases of only the responding learners (students), are reflected in the study.
- Those who did not respond to the queries may have had more to contribute. Such cases are beyond the scope of the present study.
- The data is based on opinions, which are psychological responses and may not be objective.

Correlation of the responses by the learners with other sources of data like evidence of book delivery by stores, examination results, enrolments is not within the scope of the present study. **1.12** Assumptions behind the Problem

. Hence it is assumed that the feedbacks from the different students would not differ much more.

## Justification for the Problem

Considering the societal need, the School of Continuing Education of the YCMOU launched Diploma for Electrician and Domestic Appliances Maintenance in 2006. This programme is technical/ vocational skill oriented in nature. Hence important in the employment generation point of view and even created the selfemployment while learning also. This is a pioneering and unique programme at the time. YCMOU is the first Open University in India who has launched DEDAM programme In distance education system learner is not in continuous contact with his /her teacher. Hence to execute learning by the learner various modes of communications are utilized. This involves practical counseling, theory counseling, selflearning books and CDs. While using these modes by the learners and implementing the programme by the university, many problems have to be faced on both sides ie sender and receiver in a communication cycle. As DEDAM programme is playing the role in generation self employment, it is very much important to evaluate this programme, for maintaining as per the futures need and to remove the hurdles in communication process of the programme. Effectiveness of any new programme cannot be fully studied or measured unless the various parameters in the operating system are evaluated to exploit all its benefits and problems also.

### Hypothesis of Research

The present research shall be based on the following hypothesis:

1. The learning material provided to the learners in the form of printed books, workbooks serves to fulfill the achievement of the skills in the students of the DEDAM programme.

2. The DEDAM programme is useful for the creation of the employment/self employment.

More than 40 articles related to the research are surveyed and referenced.

## Sample Selection:

The information regarding the enrolment of the students, their addresses and permanent registration number are obtained from registration centre. The 50 students (learners) at the study centre in Nasik city is used as a sample for the study. It is decided to administer the questionnaire on those 50 respondents in the study, from the study centre located in Nasik. The data is collected through the study centre. **Methodology for the Study**  The 65 questionnaires are distributed physically to the DEDAM students at the study centre in Nasik city. There is only one study centre in Nasik. Among 65 questionnaires only 50 questionnaires can be obtained in a fulfilled manner. The data is collected through the fulfilled questionnaires and analysed with the simple percentage method to obtain the results.

#### **Tools of Analysis**

The mixed type of scales is used in the tool development as per the requirement of the items and the need of response. The questionnaire for learners consisted of 46 questions in total. Different questions are asked about the personal and background information of the students (11 questions), the study material and allied academic services (32 questions) and about employability of the programme (3 questions)

#### **Research Design**

A survey process is used.

#### Statistical treatment of Data

The data generated during the study is processed with simple percentage method. The researcher is more interested in evaluating the study material of the DEDAM programme in the perception of the students ie learners.

## **Findings and Conclusions**

- 100% of the respondents in the study are male. As the DEDAM programme is related to various maintenance services in electrical wiring and various appliances, hence it involves the risk. The male students might be more interested in such kind of jobs.
- **2.** Majority of the students are unmarried that is fresher's and trying to gain the skill based programmes for the earning required for the life.

- **3.** Majority of the respondents are from the 16 to 25 years age group, that is youths.
- **4.** 76% ie majority of the respondents are from rural area. The DEDAM programme is skill based programme. It inculcates the technical skills in the respondents which the students can use for gaining the self employment.
- Majority of the students became eligible for the admission to this programme after passing the preparatory examination of the YCMOU.
- **6.** Majority that is 44% of the respondents opted this DEDAM programme for getting more knowledge in this field, 12% opted to get the job, 40% opted to increase their educational status and 4% opted to get the promotion in their existing service where they are employed.
- 98% of the respondents entered into this programme has joined just after completing the required eligibility qualifications.
- **8.** 56% of the students received the details of programme from the study center.
- **9.** 42% of the respondents are learning this programme while working for the employers. 50% respondents are focusing only on the learning of DEDAM.

### Self Study material

- 10. 98% of the respondents that is students could receive the study material in the first contact session after the admissions.
- 11. The content of the DEDAM programme is designed to provide the knowledge of repairing the various electrical wirings, circuits, domestic appliances like washing machines, mixtures and geysers etc. The complete technical knowledge is provided

through the electrical theory and practical courses. 98% of the respondents are satisfied with the study material and could understand the concepts with self study.

- 12. Diploma for Electrician and Domestic Appliances programme consists of 4 courses. Among them 2 are theory courses and 2 are practical course. The self study material is provided to learn the programme. 96% of the students reported the self study material of electrical theory and practical courses as very good. 97% of the respondents reported the self study material of appliances repair theory and practical courses as very good. Majority of the students of DEDAM programme are satisfied with the self study material of DEDAM programme.
- **13.** 99% of the respondents found the framework of the chapters in the syllabus as good. 100% of the respondents found the self study material as very good in concern with the language of the study material and proper to understand. 98% of the respondents found the self study material as very good about the explanations and the examples provided in the study material. 100% of the respondents found the self study material as very good in overall opinion.
- 14. 100% of the respondents found the self test questions mentioned in the self study material related to the content of DEDAM programme and as per the objective mentioned at the start of every unit, in the syllabus ie content of the programme.
- 15. Distance education system mainly follows the philosophy that the students have to learn more through the self study material and should depend less on the study centers or counseling sessions. Considering this requirement the books are developed in the self study format. These books consists the self test questions which are solved by the students. The data provide the feedback to the students that actually they learnt after the reading of the books. The data in table no 15 showed

that 100% of the students could understand the content of the self study books and could solve the self test questions successfully.

- 16. DEDAM programme is implemented through the various study centers located at various places in Maharashtra. Distance education system does not insist on regular teaching. Still then practical sessions require the physical attendance and the hands on practice for the skill acquirement.
- 17. The distance education system expects from the students that they should read the books prior attending the counseling sessions. The student has to go the study center just for performing practicals and to attend counseling sessions, for getting the solution to his/her academic problems. Usually the students attempt the questions in the self study material. From the score which he/she could achieve after solving the question, he/she comes to know that does he/she understand the concept of the self study material and could he gain the knowledge. Data in table no 19 reported that majority of the student found the self test questions helpful to understand the content after solving the question at the end of each chapter. Very few found the questions at the end of chapter helpful to some extent.
- **18.** From the data in table no 20 it is reported that majority that is 96% of the respondents reported that the number of self study books provided for the programme and the content of it is appropriate as per the syllabus of the programme.
- 19. The data obtained through the questionnaires is mentioned in the table 21. It revealed that majority that is 96% of the respondents found the electrical theory and practical courses as easy to understand and to learn. 96% respondents found Appliances theory course as easy to understand and 100%

respondents found the appliances practical course as easy to understand. As overall from the data it is seen that the courses in the programmes are properly designed with suitable syllabus and supported with the appropriate self study books. As a whole the students found the programme as easy to understand. This makes them happy and they could acquire the technical skills nicely in easier manner. This is satisfaction of the students as respondents.

- **20.** DEDAM programme is consisting with the content which prepares the manpower who are expert as a technician in electrical wiring and the domestic appliances repairing. Hence this programme has maximum weight age to the practical work to get the hands on practice. Hence through the questionnaire the researcher obtained the data about actual satisfaction of the respondents about the practical activities. 98% of the students reported that they could get the sufficient time for the practical work as mentioned in the programme.
- **21.** From the table no 23, it is reported that majority that is 94% of the respondents could get the 12 hours practical sessions which are maximum hours. In rest of the cases the students could not have attended all practical sessions.
- **22.** 100% students received the repeat practical sessions whenever they missed due to power failure.

23. 96% of the respondents (students) agreed that practicals add the knowledge up to moderate extent which is helpful for the students.

24. 92% students are satisfied with the self study material available for the practical activities. 90% students are satisfied with the self study material available for appliances repair practical course.

## About Employability of the programme

25. 100% of the respondents have the opinion that the knowledge gained through this programme is going to help them in their regular job/work/profession or self employment. 26. 66% of the respondents are working somewhere and doing the tasks related to the knowledge gained through DEDAM programme.

27. The DEDAM programme mainly aims to induce the technical skills in fresh students who do not know at all and to strengthen the skills who are already working and doing the basic jobs related to electrical appliances repairing. The students are expected to use the knowledge gained through DEDAM programme for the earning required for their life. With reference to this, the data from the student respondents is collected and it is found that 33 students are already working in the field related to the programme. Among 33 respondents 30% are earning Rs 10000/- per month, 33% earning Rs 7000/per month and 24% earning 5000/- per month. There are 13% students who are earning more than 10000/- per month. From the data it is clear that all 33 student respondents are earning minimum expected and the knowledge obtained through the learning of DEDAM programme is useful for the employment and for the self employment also.

## **Counseling Sessions**

28. Majority of the candidates attended all of the counseling sessions at the study center. This shows that the student respondents are interested in learning of the DADAM programme. This represents that the study center also organized the counseling sessions properly involving the good teachers.

29. The researcher attempted to get the feedback about the various students motivations for the learning of DEDAM

programme. It is found that 100% of the students respondents are motivated to learn DEDAM through the counseling sessions because the topics which are not understandable by self study are explained by the counselors and they also explain other topics in the relevant field. This information kept the student updated with the information related to DEDAM programme. 96% respondents found that they received new information through the discussions at the study center in the counseling sessions.

30. The study centers usually plan the practical activities in the small groups for the better understanding of the concepts. The regular time table is followed in the small groups but if some of the students miss the practicals sessions because of their own reasons then the study center might be showing the practical activity performance by the teachers. So that though some of the students cannot attend the practicals still there will not be any academic loss of them.

31. The respondents are from the single study center hence the schedule was uniform to all students.

32. The students of the DEDAM programme are young students usually who join the programme after the completion of SSC or doing preparatory programme. They are less aware about the different procedures and processes of the programme. Hence the study center takes care that each and every student must be informed. The study center calls all students together after the admission process completion that is first counseling session. That time the study center provides various instructions and the time table of the counseling sessions to all students in person. All of the respondent students have reported the same.

33. All respondents confirmed that the conduct the counseling sessions followed as per the time-table strictly.

34. 96% of the respondents found that the sufficient counseling sessions are organized as per the requirement of the courses, at their study center.

35. The study center has the practice to conduct appropriate counseling sessions for theory and practical courses and hence no student has given separate requirement of the counseling sessions at the study center.

36. Majority of the respondents that is 94% found the quality of counseling sessions as very good.

37.88% of the respondents follow the practice of reading the books prior attending the counseling sessions at the study center.

38. All students reported that various ways like discussion, question answer sessions, personal guidance wherever and whenever required and sometimes seating in a small group the teaching learning process is completed.

39. 94% of the respondents are completely satisfied with the counseling sessions and their academic expectations are fulfilled.

40. All of the student could get the satisfactory information regarding the DEDAM programme at the study center.

41. All of the student respondents found the other services at the study center as satisfactory. The non teaching staff cooperates the students.

Both of the hypotheses are proved through the findings.

#### Suggestions

The study material of the DEDAM programme are appropriate to the content of the programme and fufils the objectives of the programme but it is suggested that due to various developments daily new electrical domestic appliances are launched in the market. Additional supplementary information on the new appliances shall be completed through the guest lectures of the experts in the concerned field.

## 5. Bibliography

Aslam, M. (2006). Application of ODL Methodologies in Non-formal Settings and Quality Assurance: A Case Study from the Indira Gandhi National Open University, New Delhi, India. In Badri N. Koul and Asha Kanwar et al (Eds), Perspectives on Distance education :Towards a Culture of Quality Published by Commonwealth of Learning, Vancouver, 2006 pp 56

Butcher, N. (2004). Practitioner Research and Evaluation Skills Training in Open and Distance Learning: HANDBOOK B1. Canada :Commonwealth of Learning

Calder, J.& Patel, I. (2002). Monitoring and evaluation framewok for technology-based community learning centers in India Access & Equity: Challenges for open and Distance Learning by H. P. Dikshit Kogan Page Chapter 19 page 223

Deshmukh, A. (2006). Quality assurance and Best Practices at Yashwantrao Chavan Maharashtra Open University (YCMOU)

: A Case Study. In Badri N. Koul and Asha Kanwar et al (Eds), Perspectives on Distance education : Towards a Culture of Quality Published by Commonwealth of Learning, Vancouver, 2006

Edmonton, A. (1995). "The Future Of Learning" First Presented at the Minister's Forum on Adult Learning November 30-December 1st, 1995

Chauhan, P. (2001). Towards Improved Student Support Services in Open Learning university News Vol 39 No 2 ISSN-0566-2257 January 2001.

Gaba, A. K., & Dash, N. K. (2004). "Course evaluation in open and distance learning: a case study from Indira Gandhi National Open University" Open Learning Vol 19 No 2 Carfax publishing page 220 Kntayya, M., Othman, H., Mohamad, A.& Idrus, M. (2003). Evaluation of Course Delivery and Learning Supplement of the Distance Education Academic Programme of the Universiti Sains Malaysia. *Malaysian Journal of Distance Education* 5(2), 77-88

Kumar, N. (2007). Decisive Evaluation in Distance Education: A Case Study of The Certificate in Computing at IGNOU, India. *Malaysian Journal of Distance Education* 9(2), 43-63

Mishra, Vijayshri & Garg, S. C. (2009). Evaluation of an Undergraduate Physics Programme of IGNOU: A Case Study. *International Review of Research in Open and Distance Learning* 10(6), 106-122

Mishra, A. K. (1993). "Technical/ Vocational Education in India" *Technical and Vocational programmes through distance education edited by R V R Chandrashekharrao* Dr B R Ambedkar Open University, Hyderabad, pp 58

Om Prakash (2004). Nurturing Quality in Education University News Vol 42 No 48 ISSN- 0566-2257 Nov 2004

Paul, M.C. (2005). Higher Education in India and the Need of Quality Assurance Mechanisms for Developing a Knowledge Society. University News Vol 43 No 21 ISSN-0566-2257 May 2005

Paulina, P., Naswil, I. & Subagjo (2002). Embracing the Challenge: Equity, accessibility and quality. In H. P. Dikshit et al (Eds) *Access and equity: Challenges for open and distance learning*. New Delhi:Kogan Page India

Passornsiri, N. (1990). "STOU in it's first decade" *Distance* education development and access edited byIan Mugridge, MarianCroft and Others Universidad Nacional Abierta, caracas, pp 34-36

Quimb, M. T. (1998). A Model for evaluating distance education programmes Access & Equity: Challenges for open and Distance Learning by H. P. Dikshit Kogan Page Chapter 18 page 198 Roberts &Grady (2005). the developments of an instrument to evaluate distance education courses using student attitudes page 52 The American Journal of Distance Education

Reddy, V. V. (1999). "Reaching out unreached: Experiences of IGNOU" Paper presented at the IDEA conference held at YCMOU, Nashik, 30-31 Jan 1999

Rodney, S. & Dave, R. H. (1970). Developing criteria and procedures for the evaluation of school curricula in the perspective of lifelong education: A multinational study Chapter 3 in Curriculum evaluation for lifelong education page 55 Unesco Institute For Education by Pergamon press

Sharma, S. R. (1995). "Aims of Education" *Women And Education*, Discovery Publishing House pp 9,11

Satyanarayana, P. (1993). "Vocational Education at a Distance: An Emerging Scenario" *Technical and Vocational programmes through distance education edited by R V R Chandrashekharrao* Dr B R Ambedkar Open University, Hyderabad pp 148

Sharma, M. (1990). "Lifelong Education" *Distance Education*, The Asian Development Bank pp 53/54

Wilson, M. & Strydom. (2004). Programme evaluation and its role in quality assurance Handbook B4. Canada :Commonwealth of Learning

http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2013-vltn-crm-prvntnprgrm/index-eng.aspx

http://www.acf.hhs.gov/sites/default/files/opre/hpog\_implementation\_ analysis\_lit\_review\_final\_10312013\_ver2.pdf

http://www.dlprog.org/news/governance-politics-and-development-inthe-pacific-a-literature-survey.php



Buy your books fast and straightforward online - at one of the world's fastest growing online book stores! Environmentally sound due to Print-on-Demand technologies.

## Buy your books online at www.get-morebooks.com

Kaufen Sie Ihre Bücher schnell und unkompliziert online – auf einer der am schnellsten wachsenden Buchhandelsplattformen weltweit! Dank Print-On-Demand umwelt- und ressourcenschonend produziert.

# Bücher schneller online kaufen www.morebooks.de

OmniScriptum Marketing DEU GmbH Heinrich-Böcking-Str. 6-8 D - 66121 Saarbrücken Telefax: +49 681 93 81 567-9

info@omniscriptum.com www.omniscriptum.com OMNIScriptum