

CHAPTER II

THE PRESENT INVESTIGATION AND ITS IMPORTANCE

2.1 Introduction

Rapid pace of change is the main characteristic of the modern age. Such a rapid rate of change is a new thing in Man's history. The active agent behind this accelerated pace of development is education, particularly the field of higher education which owes the responsibility of the nation building task. Changes in the objectives of higher education and in its organisation, curriculum and teaching must be made to alleviate the stresses occurring within our technology based society.

The post independent era of Indian education has witnessed a number of efforts to bring about changes in the educational institutions. But the educational institutions are not changing appreciably to realise desired results. It is also being felt that the impact of new programmes and innovations is not commensurate with the input in terms of resources and human efforts. The slow pace of change in the educational institutions is the indication of their inability

in implementing the innovations. So it can be said that the institutional lag in education is not due to the dearth of innovations. It is also widely believed that we are entering a period of crisis in which resource capabilities will reach their limit while demands on resource continues to escalate. This is so more with the higher educational institutions. They are not utilising the innovations for their development. Proper implementation of innovations will only lead to real progress, if they are brought about in an orderly sequence of goal setting, planning and systematic execution.

In order to accelerate the growth of development in higher education in its quality and quantity, the government had established the U.G.C. in 1956. In 1960 the N.C.E.R.T was established. A large number of innovations were floated in the field of higher education particularly after the education commission's report of 1964. To mention a few, college humanities and social science improvement programme; college science improvement programme, correspondence courses, adult and continuing education, examination reforms; national service scheme etc. apart from workshops, seminars and inservice training programmes for the professional development of the teachers of higher education. But the magnitude of innovations is not

commensurate with the amount of change that was expected. Innovations are many but the results and impact of them is little. The aim of innovation is the change for the better. Change brings progress. The institutional lag of education in India is mainly due to the non-implementation of innovations. What is it that thwarts the implementation of innovations ? Where does the crux of the problem lie with ? Is it with the management of innovations ?

In India there are no researches done on the management of innovations, particularly at the higher educational level. The studies have been mostly on one dimension bringing into light the facilitating factors of innovation diffusion. In order to understand the factors responsible for the successful or unsuccessful implementation of innovations, it is essential to carry out an intensive study in this area. The UGC has floated many innovations, but they are suffering due to the lack of adequate implementation. The resource systems are adequate, but the implementation of the innovations is reprehensible. If the floated innovations are not properly implemented, the very purpose of it will be lost giving no room for further development, as innovations are means of change in education particularly. The changed system of education produces a new type of man equipped with the new adaptive potential. In other words, educational change is

meant for a social change. So, for bringing about change, innovation diffusion and utilisation are very much essential. Diffusion of innovation is a new knowledge emerging in the field of education. Before 1960 there was hardly concern about the utilisation and dissemination of new knowledge. While writing introduction to his monumental work, planning for innovation, Ronald G. Havelock (1973) says,

'There is a new field of knowledge emerging in the 1960s which might be described as the 'Science of knowledge utilisation'. It is probably misleading, however, to describe this emerging discipline as a 'Science' at this point in time. In reality, knowledge utilisation is at best a crude art occupying the undivided attention of only a small scattering of schools in three or four centres of learning. There are no schools, no curriculum, and few courses for training researchers and practitioners in this area, and there is as yet a dim awareness on the part of the nation as a whole that this field deserves extensive public support.'

As it is a new area, it is yet to be explored adequately. In India there are no trained personnel for the management of innovations. To some extent lack of adequate training for the utilisation of new knowledge is the cause for the institutional lag in India. The flow of new knowledge in the field of education is adequate but the dissemination and utilisation of it is not sufficient. This crisis of institutional lag has inspired the investigator to take up the present study on the implementation of innovations in higher education.

2.2 Statement of the Problem

Inspite of evidences of innovative trends in the higher educational institutions the change in education is not adequate. There are a little number of researches conducted in this field suggesting to unearth the obstacles involved in implementing the innovations in the educational institutions. So the present study is directed to understand the innovations and their implementation in higher education. The investigator is further motivated to study the causes that contribute for the failure of implementing the innovations at the higher educational stage. Hence the present problem is taken up for the study under the following title :

A CRITICAL STUDY OF THE IMPLEMENTATION OF SOME INNOVATIONS IN HIGHER EDUCATION IN THE ANDHRA STATE IN INDIA

The implementation of innovation is the perceptibility of the institution to receive, install and practice the innovation or a new idea. Innovations are the basis of change. Each innovation carries in different degrees the potentiality of bringing about some change in the relevant social system. Each innovation faces 'Kicks and Kisses' until it is properly institutionalised. What are the Kicks and Kisses (inhibiting and facilitating factors) that an innovation receives at various stages of its institutionalisation ? Hence the present study is taken up to understand the factors affecting failure and success in the implementation of innovations in higher education.

The term critical study denotes a critical analysis and interpretation of the data collected in the study, Keeping the objectives of the study in view.

Implementation in this context means the willingness of an institution to receive, install and practice a new idea. The Oxford Advanced Learner's Dictionary gives the meaning as ' carry an undertaking' , ' promise into effect '. The random house dictionary of the English language gives the meaning 'To put into effect according to' or by means of a definite plan or procedure'.

In this study, the word adoption and implementation are used synonymously. Adoption means a decision to continue full use of innovation.

Innovation means an idea or practice perceived as new by the adopter. For the purpose of this study innovation is to be taken as a measure to make education effective and productive. The word innovation has been defined by many people. A working definition of innovation is given by Ivor Morrish (1976) as 'An innovation whether in education or in any other sphere is merely something introduced which is new and different. In itself, however, it may be good or bad or neither.' Innovation may be regarded as a positive force in education as in any other sphere of activity. The term

innovation in higher education has been explained by S.E. Goodman (1976) as innovation literally means 'the initiation of something new'. There is validity for accepting the notion that a programme is innovative if it introduces a significant new dimension to the academic programme of a specific university. He further classified the innovations in higher education into three categories (1) campus specific innovations, (2) procedural innovations and (3) substantive innovations.

Higher education in this study is strictly confined to the post-graduate education in the six universities of the Andhra Pradesh. Post-graduate centres with one or two departments are not included in this study for want of time, and to study the problem in depth. For the purpose of this study the Autonomous Post-graduate Centre is treated as an university.

The term Andhra State indicates the State of Andhra Pradesh.

The importance of higher education is paramount in any society, particularly in a developing country like India. It is occupying a pivotal position in the total educational system of a country. Universities are intellectual centres of learning. The sole responsibility of developing a nation in all facets of its life is confronted with the higher education. In this post-sputnik age, the needs of the society are developing

very rapidly. What is acceptable today may not be valid tomorrow. In this constantly changing society a university no longer be a silent spectator nor be a talking pumpkin. It has to renovate to the changing requirements of the society in order to meet the social demand and to satisfy the public urge. As universities, the intellectual centres, are confronted with the task of nation building, they have to be thoroughly overhauled in all walks of their academic life.

Universities are torch bearers in the development of a nation. So, in view of their paramount and unique responsibility, they have to first create a conducive atmosphere for the implementation of innovations. Change should be the life blood of a university. So a university is constituting a major unit in receiving the innovations that are being floated by the resource system (UGC). In this study a university as an adopter system has been taken as a unit.

The University Grants Commission, the statutory body which accorded the legal responsibility of developing the higher education in the country has been taken as the resource system. It has been deliberately omitted from the study as the study is directed exclusively to evaluate the factors responsible for the successful or unsuccessful implementation of an innovation. Moreover, it is difficult to study in detail

the resource system and the adopter system, as the problem is too big to be handled single handedly. But to have an understanding of the innovations that were floated by the UGC, it is also studied to the extent of floating innovations only.

In accordance with the Radha Krishnan Commission on higher education in 1948, the University Grants Commission was established in 1953 and on passing of the UGC Act, the statutory body was set up in 1956 with Dr.C.D.Deshmukh as its first Chairman. The Central Government places funds at its disposal and in turn the Commission allocates them to the universities for developmental programmes. The responsibility of the Commission is to improve the quality and to raise the standards in the field of higher education. The Commission is required under the UGC Act, according to a report (1965)

'To take in consultation with the universities and other bodies concerned, all such steps as it may think fit for the promotion and co-ordination of university education and for the determination and maintenance of standards of teaching, examination and research in universities.' Thus the UGC has two important functions to discharge. It has to determine and maintain standards of teaching, examination and research and also to co-ordinate university education in the country.'

The Commission has been able to achieve commendable results even in the short period of its existance in every aspect of higher education. More than anything else, it has

created an appreciation of the significance of higher education in the country as a whole and succeeded in focussing attention on some of its urgent and important needs. It has floated a number of innovations in higher education to improve its quality and quantity. Nearly 40 innovations were floated in higher education within a period of 20 years which have contributed for the coordination of higher education and to maintain the standards of it in the country. At present there are 105 universities and 9 deemed universities under UGC Act in the country.

The study aims at locating the factors resisting or facilitating for the implementation of innovations at the adopter system. With a view to study the factors responsible for the successful or unsuccessful implementation of the innovations, it intends to study the role of university administrators, teachers and students. The innovation management process in the adopter system is also expected to study in detail. As communication, awareness, decision-taking play a crucial role in implementing an innovation, they are also studied to the extent of their contribution for the success or failure of an innovation.

2.3 Objectives

The main aim of the study is to know how the innovations in higher education in Andhra Pradesh are implemented in its six

universities. In order to study the problems that stand in the way of implementing the innovations in higher educational institutions (in the six universities) of Andhra Pradesh, the following are the main objectives of the proposed study.

1. To study the innovations that are taken up by various universities and to find out to what extent the innovations are successfully implemented.
2. To study the factors which come in the way of the successful implementation of the innovations.
3. To study the role of different agencies in the successful implementation of the innovations.
4. To make constructive suggestions regarding the successful implementation of innovations.

Keeping in view the above objectives, the present study on the implementation of some innovations in higher education in the Andhra Pradesh was conducted. The scope of the study is also restricted to the State of Andhra Pradesh as the study purely rests on diagnostic basis.

2.4 Scope

From the above objectives it is evident that the study is mainly directed to diagnose the causes for the successful or unsuccessful implementation of the innovations. So, the resource system, the UGC has been deliberately kept

beyond its scope of study. With an element of awareness in mind that the origin of the innovation is important, the UGC has been studied to know how many innovations are floated in higher education. In order to avoid the tailoring of innovation at the cost of its innovative character at the adopter system, the origin of the innovation was studied. Yet the study of the resource system has got less practical value in this study as it is mainly aimed, to know the causes for the successful or unsuccessful implementation of an innovation. The purpose of the innovation is valid and upheld when it is properly implemented. So, it is considered that the implementation part of the innovation is more important than its origin. Innovations are many but their utilization is much less. In this study, the adopter unit is a university. The adopter system is the target organisation in the change process. All the processes of installation, implementation and institutionalisation occur in this system. As the adopter system is the important unit to receive the innovation, it is studied in detail, paying scant attention to the resource system in this study. The scope of the study is confined to the existing six universities in the Andhra Pradesh and they have been taken as adopter units

for this study. The investigation is conducted in these six universities of the State to know the process of implementation of different innovations.

2.5 Selection of Variables

In order to know the factors contributing for the successful or unsuccessful implementation of innovations, the resource system, communication and innovation management process are studied in terms of their relevance in influencing the implementation of innovations. The role of the administrators, administrative staff, teaching staff, and the students, are studied in terms of their contributions for the successful or unsuccessful implementations of an innovation. UGC has been taken as the resource system as it is confronted with the statutory responsibility of developing higher education in the country. No other resource system has been taken into consideration for this study.

In a centralised system like that in Indian states, the installation is largely the job of the resource system. The initiative of the resource system for implementing an innovation by providing financial assistance, the technical manpower, equipment and proper communication are also

studied from the point of view of the adopter system, as the adopter unit needs guidance, constant encouragement, protection and follow up, for the successful implementation of an innovation.

The implementation of an innovation has two important functional dimensions. One is the process of saving innovation from distortion and rejection and the other is the process of developing and utilizing human and material resources for the adoption. The main focus of the study is concentrated on the adopter system as it is the target organisation in a change process, which decides the fate of an innovation. For this study a university is considered as an adopter unit. So in every university three variables are studied. They are :

(1) Administrators (2) Teachers and (3) Students. Under administrators : general administration of the university, physical facilities, decision taking, laboratory facilities, library facilities, financial facilities, communication facilities and awareness are studied. Under the teachers : availability of experienced teachers, in-service training facilities, involvement in decision taking, process to change, awareness, and the relationship with the Head of the department and the university are studied. The opinions of the students are also studied in terms of their awareness and supporting or non-supporting behaviour on the implementation of an innovation.

Some hypotheses are formulated in order to conduct the present research on systematic lines.

2.6 Hypotheses

After formulating the objectives and spelling out the scope and need of the problem, it was hypothesised that,

1. Lack of proper orientation and dissemination of knowledge about the innovation is the primary cause for the failure of an innovation.
2. Lack of clear understanding about the objectives of the innovation is the main cause for the failure of implementing the innovation successfully.
3. Lack of adequate resources, finance, trained personnel and proper assistance from the authorities are also contributing very much for the failure of the innovations.
4. Lack of infrastructure laboratory facilities, adequate furniture, in the institutions are also factors responsible for the failure of an innovation.

2.7 The Procedure

The method of investigation depends upon the purpose of the study. The present investigation aims at studying the factors contributing for the successful or unsuccessful

implementation of an innovation in a system or an institution. From the objectives of the study it is clear that the problem has an inherent diagnostic purpose, detecting the defects in the implementation of the innovations. It requires an intensive investigation on the complex factors that contribute for the successful or unsuccessful implementation of an innovation. So, case study, after considering carefully, is chosen as a method to study the problem.

In spite of pre-ponderance of quantitative studies, the importance and use of the case study approach in diffusion research has been time and again specified by various authors. Havelock (1973) indicated that it was disappointing, 'to find out so few case studies, of the thousands of dissemination and utilisation events that take place each year, it is unsettling to find so few documents in such a way that other could learn from them'. Jones (1969) studied the 'planned organisational change by the analysis of nearly two hundred cases by Techniques of Content Analysis'.

The present investigator is proposing to study the implementation of some innovations in higher education in the Andhra Pradesh, that is, in the six universities of

the State. As the case study method is chosen to know the factors contributing for the successful or unsuccessful implementation of innovations, eighteen innovations are taken as cases for the present study from the six universities of the State. The investigator proposes to study at least three innovations from each university. The total number of innovations that are taken for the purpose of this investigation are 18 from all the six universities of the State put together. There are four common innovations in these 18 cases. The cases for both the successful or unsuccessful implementation of an innovation are studied critically. So, the investigator proposes to study every innovation in terms of its date of implementation, objectives of implementation, period of continuity, impact, and the specific features. The historical survey method was also used to study the background and objectives of innovations particularly.

Inspite of all the advantages of the case study method, the problems of shortcomings of its non-standardised procedures and the questionable reliability and validity of the case materials are also not ignored. Goode and Hatt (1952) suggest that 'the basic danger in its use is the response of the researcher, the researcher comes to feel a

false sense of certainty about his conclusions. The danger, then, does not lie in any technical weakness of this approach to social processes or individuals as a whole.'

Literature on the criticism of the method of case study helped to minimize the faults at different levels. The most serious criticism of case study as an approach is that it does not have the potentiality to generalise. This is mainly due to the small sample taken up in a case study, which fails to do justice to its exhaustiveness as well as intensiveness. But it has been seen that with the careful selection of cases, the case study method can be used for the purpose of generalisation also. In the present study, to have a broad base and to develop the material usable for generalisation purpose, cases are carefully selected and the number is also taken large to have a big sample which can give justice to its exhaustiveness.

2.8 Selection of Cases

From its very nature, it is clear that the problem requires an indepth study. So to make an intensive study, one state is chosen, that is Andhra Pradesh. This State is selected on the basis of its contribution to the development of higher education in the country. Secondly, the close association of the investigator with the adopter units made

the investigator to take this State as it naturally gives some facility to obtain the reliable data. At the outset it was thought to have a comparative study of the problem by taking the two states of Gujarat and Andhra. But on the suggestion of the experts, the jurisdiction of the study is confined only to Andhra Pradesh. Moreover, it is not possible to have an in-depth study by employing case study method single handedly if the jurisdiction is vast. It has become a problem to the investigator to consider the constraints of time and money in this work. So, the Andhra Pradesh is taken as a sample for this study. There are five universities and one post-graduate centre at Ananthapur in this State. They are, (1) Andhra University (2) Nagarjuna University (3) Osmania University, (4) Kakatiya University, (5) Sri Venkateswara University and (6) The autonomous post-graduate centre. All these universities implemented a number of innovations after their inception. Naturally it is also not possible, in a study like this, to study all the innovations that were implemented by all the universities in the State. So three innovations from each university are selected for the purpose of this study. The investigator studied 18 cases in all the six universities of the State taking three from each university. The cases are also selected on the basis of their contribution

to the institution or in the other relevant social system. Some distorted cases are also studied to have the knowledge of factors contributing for the dilution of innovations. After a very careful consideration and a preliminary survey conducted by the researcher in November 1977 to all the six universities of the State, the cases were selected. The universities and the innovations that are selected for the present study are as follows :

1. Andhra University : (i) Internal Assessment
(ii) Semester System
(iii) Correspondence Course
2. Nagarjuna University : (i) Internal Assessment
(ii) Semester System
(iii) M.Phil.
3. Osmania University : (i) Internal Assessment
(ii) M.Phil.
(iii) Correspondence Course
4. Kakatiya University : (i) Internal Assessment
(ii) Semester System
(iii) M.Phil.
5. Sri Venkateswara University : (i) Internal Assessment
(ii) M.Phil
(iii) Correspondence Course
6. Autonomous Post-graduate Centre : (i) Internal Assessment
(ii) Semester System
(iii) M.Phil.

The total number of universities are six and the total number of innovations are eighteen in all the six universities. But there are four common innovations, viz., the Internal Assessment, the Semester System, and the M.Phil. course and the correspondence course practiced by all the six universities of the State and they are studied in detail.

2.9 Instrumentation

In the present study some tools are used to obtain the required data for the project. The selection of tools depends upon the purpose, the variables and the design of the study. In studies on innovation, particularly on their implementation, a large number of tools have been used. As it is a case study method, a case study proforma is used as a major tool apart from other tools. The other tools implemented for the data collection in this study are, the questionnaire, the techniques of interview, study of records and non-participation observation. These tools are described as follows :

2.9.1 Case Study Proforma

As case study method is the main tool of the present study, one case study proforma is constructed for this purpose. It contains questions like, (a) information about the university, (b) the innovation (c) resources needed for the innovation

(d) innovative features of the project (e) procedure followed for the implementation of the innovation, (f) implementation of the innovation (g) evaluation, (h) impact, (i) impressions and inferences. These main questions are followed with relevant sub-questions in the case study proforma. Apart from this, the information, like, the needed financial and human resources, other agencies and their contribution are also studied by employing this case study proforma.

In November 1977 a pilot study was conducted in the six universities and obtained some raw data. On the basis of this crude data the case study proforma was constructed. First the proforma was placed before a group of experts for their valuable suggestions and comments. Later with some modifications, it was administered to a group of people including professors and readers of the M.S. University of Baroda, Baroda. After thoroughly verifying its validity from their evaluation, the proforma was printed and used for the final study.

2.9.2 Questionnaire

In this study one questionnaire is also used for collecting the data. All the necessary precautionary measures were taken while preparing the tool. On the basis of the literature studied on the resources system, the adopter system and the related literature on the innovation diffusion

process, the questionnaire was prepared. At the outset the questionnaire was distributed to a group of experts in the Centre of Advanced Study in Education, M.S. University of Baroda, Baroda. In the light of their suggestions, some statements were deleted. Again a pilot study was conducted in March 1978 to a group of people in M.S. University, Baroda to obtain the reliability of the tool. Later with some modifications the questionnaire was prepared and used for final data collection in the six universities of Andhra Pradesh.

The questionnaire contains three parts, A, B and C. Part A - contains 42 statements. Some facts, practices and activities are described in a simple statement form, each of which contains four alternatives. A, B, C and D. Part B contains 32 statements each of which explains the resisting factors while implementing an innovation. Every statement is having its significant contribution in thwarting the implementation of an innovation. Part C of the questionnaire is having 22 statements each of which is carrying a suggestion for the successful implementation of the innovation. Each statement in Part B and C contains two alternatives, 'agree' or 'disagree'. Apart from these three categories, the questionnaire contains questions like, the bio-data of the

teacher, the student and the institution.

It was suggested by the experts, by the very nature of the study, the tool of case study proforma is more than sufficient to study the problem in depth. But in order to have an amount of greater reliability, the questionnaire was prepared. Moreover, the investigation is to be conducted on two main purposes, as it is clearly spelled out in the objectives. The first purpose is to study the objectives of some selected innovations in higher education and to know the process of their implementation in an university. The case study proforma is used to collect data to this extent. The second purpose of the investigation is to find out the factors responsible for the successful or unsuccessful implementation of innovations. The case study proforma is constructed in such a way that it can obtain information with regard to the factors contributing for the successful or unsuccessful implementation of an innovation, but, thinking that, it may not be possible to get the required information, a separate questionnaire is also constructed with altogether a different content. The main purpose of the questionnaire is to know the factors contributing for the success or failure of an innovation in terms of the attitude of the administrators, the administrative problems of the University, the teaching staff and their attitude and involvement in the change process

and the opinions of the students. So, the questionnaire is administered to know the attitude of administrators, teaching staff and the students, towards the feasibility of the implementation of an innovation. But the case study proforma is used to know the processes of installation, the period of continuation and the present position of the innovation in an institution. Moreover, these two tools are administered with a view to cross validate the data and to obtain maximum reliability.

2.9.3 Interview

It is used as a major technique in this study. Apart from the case study proforma, interview technique is also used to get reliable information. Instead of a structured or unstructured, schedule interviews were conducted on interview guides, comprising a list of supplementary points and questions, which should be covered during the course of interview. The possible questions, that would arise in the course of interview were contemplated and listed out, in order to avoid ambiguity and to get the desired information.

2.9.4 Study of Records

In order to obtain data for this study, the major areas of records study were, the related literature, reports,

resolutions of the syndicate and the University Acts. This study of records is used only to collect data on the implementation of innovations. Records in UGC also studied at Delhi to collect data on the origin and objectives of the innovations.

2.10 Data Collection

For the purpose of data collection, three different samples of administrators, the teachers and the students are taken from the six universities of Andhra Pradesh. Mainly two tools, the case study proforma, and the questionnaire are used to collect data apart from other techniques. It is proposed to obtain relevant data through these two tools by employing them simultaneously. As far as possible interviews are conducted for getting data through the case study proforma from the people who are not given the questionnaires. Though it is somewhat a hard job, in order to cross validate the data and to obtain maximum reliability, these two tools are employed at a time, as far as possible to different people.

A stratified sample of 6 universities is taken from the Andhra Pradesh. The criteria of stratification is non-professional universities including the Autonomous Post-graduate Centre at Ananthapur. Post-graduate Centres are not

included in the study for want of time and money. Based on the stratified sample of six universities, the corresponding Vice-Chancellors, Registrars, Personnel connected with the UGC Cells, the Deans, the Principals, the Directors of the Correspondence courses, the Heads of the Departments, Teachers and the students became the respondents.

For administering the case study proforma and the questionnaire a random sample of 500 and 600 respondents from the administrators, teachers and students are taken up respectively from the six universities. The case study proforma was completed by the investigator by taking interviews from the respondents of all the six universities. The data through the case studies were collected from 50 administrators (10 administrators from three universities; viz., Andhra University, Osmania University and Sri Venkateswara University; 7 administrators from two universities, viz. Nagarjuna University and Kakatiya University and 6 administrators from one university that is Autonomous Post-graduate Centre) 150 teachers (40 teachers from three universities, viz. Andhra University, Osmania University and Sri Vankateswara University; 10 teachers from three universities, viz., Nagarajuna University, Kakatiya University and the Autonomous Post-graduate Centre) and 300

students (50 students from each university) from all the six universities of Andhra Pradesh. The total sample is 500.

A random sample of 600 respondents including administrators, teachers and students are taken up to distribute the questionnaire among the six universities. The data through the questionnaire were collected from 60 administrators ; (10 administrators from each university) 240 teachers, (40 teachers from each university) and 300 students (50 students from each university) from all the six universities of Andhra Pradesh. The questionnaires were distributed to all the respondents in all the universities separately for each innovation.

It took nearly 105 days for the investigator to collect the data from these six universities by employing these tools. The raw data was processed by applying necessary statistical treatment and the results are reported after discussing the validity of the data.

Before going to present the case studies in the fourth chapter, the next chapter deals with the related literature on the topic of the present study.
