CHAPTER SEVEN

SUMMARY, DISCUSSION AND INTERPRETATION OF THE MAJOR FINDINGS OF THE STUDY

The present study revealed a number of findings related to objectives. These findings allowed the investigator to think of the implications of these findings in the present educational scenario with special reference to the area of Business Studies. The findings also suggested the researcher to think of the studies required to be taken up in future. They made scope for the expression of some deep insights of the investigator. These implications, suggestions for future research and the insights of the investigator in the form of discussion and interpretation of major findings are presented in this chapter. A brief description of the complete methodology of the research study is also detailed in the first part of this chapter.

7.0.0 INTRODUCTION

The world is witnessing a high-tech revolution with changes in science, technology, commerce and industry. The world now believes that knowledge is everything. With the opening up of world economy by way of globalization, liberalization and privatization processes, all the business sectors witness a tremendous growth. The whole economy undergoes a tremendous transformation with many new sunrise sectors like financial services, consultancies etc coming up. The service sector is outstripping the manufacturing sector in growth. A career in
these sectors involves challenging work, high growth opportunities, lucrative pay packets and a professionally challenging work environment.

The corporate world is dynamic and the changes are so severe where a series of new concepts and techniques are coming fast into being and the earlier and traditional ones become obsolete. This situation has given rise to the restructuring the curricula of business education at all levels so as to make it meaningful and compatible with the changing business scenario and to introduce the concepts and techniques to further channelize and streamline their contribution to business education.

The emergence of Globalization, Privatization and Liberalization has brought a number of changes in the world especially in all spheres of human life including education. The concept of globalization, considering different parts of the world into a global village under one roof has made an impact on the world economy. This has brought the new idea of interdependence between and among the nations and this interdependence has increased tremendously (Routledge 2010).

As a result of this growing interdependence, it laid a strong foundation for a number of aspects like the establishment of foreign collaboration of business, increasing international flow of capital, technology, emergence of multinational companies, increased standard of living, employment opportunities, bilateral and unilateral trade agreements between countries, global sourcing of raw materials and components of machineries, international movement of labour, from developed to developing countries and vice versa and investment on education anywhere in the world.

In this context of a competitive world, the discipline of business education is highly significant for the purpose of training every individual to enter into the global society. To enter into the global society, a competitive standard of practices in education is the basic requirement (Jaime Ortiz 2004). So the very important objectives of the curriculum involve making a deliberate attempt to plan the
education as per the need of the global society (Ronald J. Kushner 1999). Education in the global context is never meant to be mere transactions of the content in the classroom but it should also emphasize to promote the entire capacities and capabilities of students.

Kothari Education Commission (1964-66) rightly remarked that the educative process should enable an individual to attain the fulfillment of learning and earning perspective. Learning perspective means the depth of knowledge that an individual acquire from education that is designed by the curriculum, whereas earning perspective means an individual’s capability of managing day today affairs of life.

To accept the proposal of Kothari Education Commission (1964-66) in the growing global educative era, the need of business education has a significant role. Business education has a dominant role to prepare students to foster their intellectual, social and moral development and specifically it prepares students in developing knowledge, skills, understanding, attitudes and formation of personality in the field of study they choose.

The goal of education should be to plan and to prepare students to develop their innate potential so that they will be able to face the probable challenges and difficulties in their field of life. Thus this approach may help the students to fulfill a number of objectives like understanding the nature of the business activities, the environment within which they function, with particular reference to the situation they live in gaining knowledge of the theoretical and practical aspects of the operation of the various types of organizations, understanding the role of business activities in the modern world, develop awareness of the changing and integrated nature of business to explore and deal with problems that arise in different situations of their life.

7.1.0 Need for the Study

Business Studies being a very significant part of the school curriculum at plus two level, it needs to be transacted effectively. This requires a great deal of
research work in the process of teaching learning in the field of business studies in order to achieve the set objectives. In this connection, the investigator made an attempt to study comprehensively the research work undertaken related to the said area. It has been found that very meager studies have been undertaken in relation to business studies with special reference to class room transactions (Kathleen M Eisenhardt(1991), M.O Gbinoba, (2008), Newell S., et al (2003), M Kathleen Eisenhardt et al(2000) and that studies related to this issue in India is very scanty.

To meet the growing needs of the society, there is greater demand for sound development of business education. The relevance of business education has become more imperative, this means a marked change in the way business and management education is perceived in India. Through teaching, research, and service, the College of Commerce is dedicated to developing tomorrow's leaders, managers, and professionals.

Realizing the need for business studies in the present context and also identifying vividly a need for a unique approach to curriculum transaction of business studies, that the present investigator made a thorough study of different transactional approaches and found that ‘Constructive Approach’, would satisfactorily transact competencies related to business studies. But exclusive study where constructive approach has been used in the area of business studies areas also was not found by the investigator. The effectiveness of constructive approach in parallel subjects (Nancy Harding (2003), Acta Paul (2008), Steven Jordan et al (1998), Mike Watts et al (1989), Jones Brader et al (2008), John Majoe et al (2008), has motivated the investigator to apply constructivism approach in the context of the present study.

Thus the investigator selected a problem titled “A study on the Identification and development of Competencies related to Business Studies at plus two level based on constructive approach. The above needs lead to the following research questions;
1. What are the competencies to be developed among the students at plus two level in relation to Business Studies?

2. What is the present status of Competencies related to Business Studies among the plus two level students in Thrissur District?

3. What are the co-relates of competencies related to Business Studies among the students at plus two level in Thrissur District?

4. Does the present status of study require any intervention to Develop Competencies related to business studies among the students at plus two level in Thrissur District?

5. What alternative strategies would contribute to Developing Competencies related to Business Studies among students at plus two level in Thrissur District?

6. Can constructive strategies contribute to developing Competencies related to Business Studies among the students at plus two level in Thrissur District?

7.2.0 Statement of the Problem

A study on the Identification and Development of Competencies related to Business Studies at the plus two level students of Thrissur District.

7.3.0 Objectives of the Study

7.3.1 Objectives of Baseline Data

1. To validate the Competencies related to Business Studies at the plus two level

2. To study the status of Business Competencies among the plus two students in Thrissur District.

3. To study whether there exists any significant relationship between

   i. Business Competencies and Business Aptitude of students at the plus two level.

   ii. Business Competencies and Business Achievement of students at the plus two level.
7.3.2 Objectives of Experiment

4. To develop a Specially Designed Instructional Package to foster selected Business Competencies among plus two students in Thrissur District.

5. To study whether there is any significant difference between the mean scores of the pre-test on Business Achievement of the experimental and control group.

6. To study the effectiveness of the Specially Designed Instructional Package in relation to the traditional Approach in fostering selected Business Competencies (Leadership and Communication) among the plus two students, after adjusting for the initial differences in Business Aptitude and Business Achievement.

7. To study the effectiveness of the Specially Designed Instructional Package in relation to the traditional Approach in fostering Leadership Competencies among plus two students, after adjusting, for the initial differences in Business Achievement and Aptitude.

8. To study the effectiveness of the Specially Designed Instructional Package in relation to the traditional Approach in fostering Communication Competencies among the plus two students, after adjusting for the initial differences in Business Aptitude and Business Achievement.

9. To study the variational effect of the Specially Designed Instructional Package intended to foster Business Competencies among the plus two students in Thrissur District with respect to Gender.

10. To study the variational effect of the Specially Designed Instructional Package intended to foster Leadership Competencies among the plus two students in Thrissur District.

11. To study the variational effect of the Specially Designed Instructional Package intended to foster Communication Competencies among the plus two students in Thrissur District.
12. To study whether there is any significant difference between the mean scores of the pre-test and the post-test of experimental group on Business Competencies.

7.4.0 Operational Definitions of the study

**Development:** Development is the gradual advancement or growth through a series of progressive changes. It is a path to achieve certain goals. In the present study, the word ‘development’ is used to denote the enhancement or fostering the Competencies Related to Business Studies at plus two level with the understanding that the students of Business Studies already possess some basic knowledge related to business.

**Business Studies:** A course of study that is designed to be taught at the plus two level under the commerce curriculum. This subject contains economic and financial subjects as well as an orientation towards managing a business. It is the study of the management of individuals to maintain collective productivity in order to accomplish particular creative and productive goals.

**Competencies:** Competencies are the ability to perform one or a group of tasks consisting of essential skills, knowledge, attitudes, and behaviours required for effective performance of a real-world task or activity. In the present study competency is the ability to perform tasks related to the business fields that are prescribed directly or indirectly in the curriculum of business studies at the plus two level.

**Business Competencies:** These are the competencies that are required to be developed among business studies students to achieve the goals related to the learning of this subject. In the present study, the word ‘Business Competencies’ specifically refer to two basic competencies of business studies, namely, ‘Leadership Competencies and Communication Competencies’. The cumulative scores of students on Business
Competencies test validated by the investigator were considered as the scores of the students on Business Competencies.

**Leadership Competencies:** Leadership competencies are the underlying characteristics possessed by a leader that leads to superior performance in an activity. In the present study, the term ‘Leadership Competencies’ involves eight basic components, namely, ‘self management, taking initiative, problem solving, self confidence, Negotiation, Risk taking, Personal integration and Managing people’. The cumulative scores of students on Leadership Competencies Rating Scale validated by the investigator were considered as the scores of the students on Leadership Competencies.

**Communication Competencies:** Communication competencies are the ability to send messages which promote the attainment of goals while maintaining social acceptability. In the present study, ‘Communication competencies’ is the ability of commerce students to communicate efficiently in a business environment. In the present study, the term ‘Communication Competencies’ involves seven basic components namely, Active listing, Spontaneity, Understanding, Accuracy, Trust building, Team building and Motivation. The cumulative scores of students on communication competencies rating scale validated by the investigator were considered as the scores of students on Communication competencies.

**Business Aptitude:** Business Aptitude means the ability of an individual to respond naturally to different situations that are closely related to economic activity. In the present study the Aptitude of the students in relation to the performance of tasks in the business field is considered as business aptitude. The cumulative scores of students on Business Aptitude Rating Scale validated by the investigator were considered as the scores of the students on Business Aptitude in the study.

**Business Achievement:** Achievement is the performance of students in a test or examination based on the objectives of the course. In the present
study the performance of students in the business achievement test at the plus two level is considered as Business Achievement. It is the cumulative scores of students on the Business Achievement test validated by the investigator.

**High Level Business Competencies:** The Plus two level students who exhibited scores more than \( M+1S.D \) on the Business Competencies rating scale were considered as having high level business competencies.

**Average Level Business Competencies:** The plus two level students who exhibited scores between \( M+1S.D \) and \( M-1S.D \) on Business Competencies rating scale were considered as having average level Business Competencies.

**Low Level Business Competencies:** The plus two level students who exhibited scores less than \( M-1S.D \) on Business Competencies rating scale were considered as having Low level business competencies.

**Instructional Package:** The package developed by the investigator to develop business competencies namely, leadership and communication competencies using a ‘Constructive approach’, is known as the instructional package.

**Traditional Treatment:** Traditional treatment is the regular input given by the teachers at the plus two level (Commerce Stream) consciously or unconsciously to develop Business competencies.

**Constructive Approach:** Constructive approach is an approach based on the philosophy of constructivism according to which human construct knowledge and meaning from their experiences. In the present study, constructive approach means, the approach where the learning of students is facilitated by creating a constructive environment.

**Plus Two Students:** Students who are pursuing Business Studies as a subject at the higher Secondary or Pre-University level of education under the Kerala State Government.
**Plus Two Level:** The level of education imparted after high school classes where the students are be given the choice to select interested areas of discipline under the Kerala State education system.

**Thrissur District:** One of the fourteen districts of Kerala State.

### 7.5.0 Methodology of the Study

#### 7.5.1 Methodology of Baseline Data Study

#### 7.5.1.1 Variables

The variables for base line data study were as follows;

- Business Achievement,
- Business Aptitude
- Business Competencies namely, Leadership and Communication Competencies.

#### 7.5.1.2 Population

Since the present study involved objectives at two levels, two groups of population were identified. For objective one the population consisted of all the teachers teach Business Studies as a subject at the plus two level. For objectives two and three, the population consisted of all the students pursuing Business Studies as a subject at the plus two level. This was the population, to which the investigator wanted to generalise the results of the present study.

#### 7.5.1.3 Sample

To study the first objective namely, “To validate the competencies related to Business Studies at plus two level”, the investigator selected thirty (30) teachers who teach Business Studies (Commerce stream) as a subject at the plus two level in Thrissur district. To study the objective two namely “Identification of competencies related to Business Studies at the plus two level” and to study and “To study whether there is any significant relationship between Business Aptitude
and Business Competencies, and Business Achievement and Business Competencies of students at the plus two level”, the investigator selected three hundred (300) students studying Business Studies as a subject at the plus two level by giving proper representations to gender, types of institution, and location.

A stratified random sampling technique procedure was followed to select the sample under the base line data. The diagrammatic representation of the sample for objectives two, and three is shown chapter four under figures 4.1 and 4.2.

7.5.1.4 Hypotheses

**H1:** There is no significant relationship between Selected Business Competencies and the Business Aptitude of students.

**H2:** There is no significant relationship between Selected Business Competencies and the Business Achievement of students.

7.5.1.5 Tools employed

Five tools were used to measure the independent variables of the study, namely, Business Competencies Mapping Scale, Business Aptitude rating scale, Business Achievement test, Leadership Competencies rating scale and Communication Competencies rating scale. These five tools, one was a standardised tool (Business Attitude) and the rest were validated by the investigator. The standardized tool was modified into a rating scale by the investigator. The detail about the process of validation these tools is given in chapter four under captions 4.3.1.5(i) to 4.3.1.5(v)

7.5.1.6 Procedure Followed to Collect Data

To collect to Baseline data related to objective one, a Business Competencies Mapping Scale was administered to thirty teachers (30). The teachers were addressed in a group and were oriented about the purpose and objectives of the study. They were made to respond to the tool in the presence of the investigator and the data was collected.
To collect data related to objectives second and third of the base line data, the investigator administered Business Competencies (selected Business Competencies namely Leadership and Communication Competencies) rating scale to three hundred (300) students. The investigator personally visited the school and administered the tool and collected the data.

7.5.1.7 Research Design

The baseline data study had two objectives, namely, Identification of Competencies related to Business Studies at the plus two level and studying the status of Business Competencies of the plus two level students. The details of different phases followed to study these two objectives under the base line data study is given in chapter four under caption 4.3.1.6, Table 4.16.

7.5.1.8 Statistical Techniques used

Different statistics have been used to analyze different objectives under base line data study. There were three main objectives under the base line data study. Details of the objectives and statistics used under the baseline data study is given in chapter three under caption 4.3.1.8.

7.5.2 Methodology of the Experiment
7.5.2.1 Variables

1. Independent variables
   The independent variable was a specially designed package to foster Business Competencies.

2. Dependent variables
   The dependent variable involved the selected Business Competencies Leadership and Communication Competencies of the students.

3. Co-variates
   The co-variates considered in the present study were:
7.5.2.2 Population

For the present study, the population consisted of all the plus two level students of Thrissur district who study in the commerce stream under the Kerala Higher Secondary State Syllabus. This was the population, to which the investigator wanted to generalise the results of the present study.

7.5.2.3 Sample

The sample in the present consisted of 50 Business Studies students at plus two level, during the academic year 2009-10. To select students for the experimental group and the control group, ‘Business Achievement Test’ was administered to all the students at the plus two level. The detail about the selection of the sample in experiment study is given chapter four under caption 4.3.2.3.

7.5.2.4 Hypotheses

H3: There is no significant difference between the mean scores of the pre-test on Business Competencies of students of the experimental and control groups.

H4: There is no significant mean difference in Business Competencies scores between the students undergoing instruction through the Specially Designed Instructional Package and students taught through the traditional treatment, after adjusting for the initial differences in Business Aptitude and Business Achievement.

H5: There is no significant mean difference in Leadership Competency scores between the students undergoing instruction through the Specially Designed Instructional Package and students taught through the traditional treatment, after adjusting for the initial differences in Business Aptitude and Business Achievement.
H6: There is no significant mean difference in Communication Competencies scores between the students undergoing instruction through the Specially Designed Instructional Package and students taught through the traditional treatment, after adjusting for the initial differences in Business Aptitude and Business Achievement.

H7: There is no significant mean difference in the post-test scores of Boy and Girl students of the experimental group on the selected Business Competencies

H8: There is no significant mean difference in the post-test scores of Boy and Girl students of the experimental group on the selected Leadership Competencies.

H9: There is no significant mean difference in the post-test scores of Boy and Girl students of the experimental group on the selected Communication Competencies.

H10: There is no significant mean difference in the scores of the pre-test and the post test of students of the experimental group

7.5.2.5 Tools Employed

The specially designed instructional package was the facilitating tool during the experiment. The procedure for the development of the tool is detailed in Chapter five under captions 5.1.0 to 5.17.

7.5.2.6 Procedure Followed to Collect the Data

Before the experiment, the test and rating scale on co-variates and Business Competencies rating scale was administered to students of both the experiment and control groups and related data was collected. Details is given in chapter three caption 4.3.2.6

7.5.2.7 Research Design

The present research was experimental in nature involving the ‘Post-test only Equivalent Group Design’. A diagrammatic representation of the experimental design used in the experiment is given chapter four under Table 4.19.
7.5.2.8 Statistical Techniques used

The investigator has used different statistical techniques to analyse the different objectives of the experimental study. The details of the statistical techniques used for the experiment study are given in chapter four under caption 4.3.2.8 and table 4.20.

7.6.0 Major Findings of the Study

- The competencies related to Business Studies are found to be - Quest for knowledge, Decision Making, Planning, Relationship Management, Negotiation, Communication, Achieving integrity, Analytical Ability, Emotional Intelligence, Personality development, Leadership, Motivation, Social Responsiveness, Ethics, Risk Taking, Adaptability, Empowering Others, Managing Change, Social adjustment, Thoroughness, Self Confidence, Initiative, Stress Management, Flexibility, Entrepreneurial Orientation.

- Majority of the students at the plus two level are found to be at Average level in relation to Business Competencies and a very few of the sample exhibited a high level Business Competencies.

- There is a significance relationship between:

  1. Business Competencies and Business Aptitude of the students at the plus two level of Thrissur District.

     i. Business Competencies and Business Achievement among the students of Thrissur District at plus two level.

- Instruction using the Specially Designed Instructional Package is significantly more effective than the traditional treatment in fostering Business Competencies among the plus two level students.
• Instruction using the Specially Designed Instructional Package is significantly more effective than the traditional treatment in fostering Leadership Competencies among the plus two level students.

• Instruction using the Specially Designed Instructional Package is significantly more effective than the traditional treatment in fostering Communication Competencies among the plus two level students.

• The experimental treatment was not resulted in any differential effect in relation to the post-test scores of selected Business Competencies of Boys and Girls. Therefore the Specially Designed Instructional Package can be used equally for the Boys and Girls to foster Business Competencies.

• The experimental treatment was not resulted in any differential effect in relation to the post test-scores of Leadership Competencies of Boys and Girls. Therefore the Specially Designed Instructional Package can be used equally for the Boys and Girls to foster Leadership Competencies.

• The experimental treatment was not resulted in any differential effect in relation to the post-test scores of Communication Competencies of Boys and Girls. Therefore the Specially Designed Instructional Package can be used equally for the Boys and Girls to foster Communication Competencies.

• There is a significant difference between the mean scores of the pre-test and the post-test of experimental group on Business Competencies’’ and hence the Specially Designed Instructional Package is effective in developing Business Competencies among plus two level students.

7.7.0 Discussion and Interpretation of the Major Findings of the Study

The following paragraphs are devoted to the discussion and interpretation of the major findings of the study related to different objectives. The interpretation of each of the findings of the study is done in the light of the methodology
employed in the study and the previous research reviewed in chapter three. All these aspects are presented under captions, Discussion and interpretation of the findings of objectives One, Discussion and Interpretation of the findings of objectives Two, Discussion and Interpretation of the findings of objective Three, Discussion and Interpretation of the findings of Six, Seven and Eight, Discussion and Interpretation of the findings of Objective Nine, Ten and Eleven and Discussion and Interpretation of the findings of Objective twelve.

7.7.1 Discussion and Interpretation of the Findings related to Objective One

The first objective of the study was, “To validate the competencies related to Business Studies at plus two level”. In order to study this objective, the data was collected from 30 teachers who teach Business Studies (commerce stream) as subject at the plus two level in Thrissur District.

The present study identified number of competencies based on the opinion of experts. Competencies related to Business Studies were found to be - Quest for knowledge(Parry and Scott B.1996), Decision Making(Murnighan, John Keith, and John C. Mowen 2002), Planning (Kim Eugence and Kellough Richard D. 2003), Relationship Management (Dowse and Eileen 1998), Negotiation (Gregory A. Garret 2005), Communication (McCroskey James C. 1985), Achieving Integrality (Nichole Bobo, and Virginia W. Adams (2002)), Analytical Ability(Zottmann, J.M and Goeze A, (2010), Emotional Intelligence (Bock, H and Ruyak R. 2008), Personality Development (Kurz, R. & Bartram, D, 2002), Leadership( Marzano and Robert J,2005), Motivation (Andrew J. Elliot and Carol S. Dweck 2005), Social Responsiveness (Bryan Sokol, Ulrich Muller,2005), Ethics (Rita Sommers and Flanagan John 2007), Risk Taking Ortwin Renn (2009), Adaptability (Robert L. Duran 2006) Empowering Others (Kenneth W. Thomas and Betty A. Velthouse 1990), Managing Change(Alan Gillies and John Howard 2003), Social adjustment (Timothy A. Cavell 2010), Thoroughness (Sutton, Robert 2010), Self Confidence, (Anthony Robbins 1992), Initiative (Competency Library, Syracuse University), Stress Management (Emma Donaldson and Feilder 2009),
Flexibility, (Abrahamson A 2000), and Entrepreneurial Orientation (Li Xiang 2009).

The process of identification of Business competencies by experts in the field of education and business revealed that the Business Competencies are identified differently by different experts in the fields. A few competencies have been found to be common and rest are specifically identified by different business and management experts. The reasons for differences in the identification of business competencies can be attributed to the difference in perspective of each expert in Education, Business and Management fields which, is highly subjective. Some may view competencies as a dominant factor for business success and others views competencies as a part of professional and personal development.

It was found that the meaning of competencies by educationist implies that competency is a course of study designed to be taught at higher secondary classes under commerce curriculum. But the status of business education shows that building competency at school and university level is inadequate and found attempts taken to plan and develop a competency based business education to cultivate the required business skills as per the present educational need is meagre (Andre Auger, 1998). It was found that the perspective of Business Competencies differ significantly. For educationist, these competencies are the ability required of young entrepreneurs who are yet to get in to the field. This again implies that the development of competencies at this level is a gradual process of imbibing the tasks in sequence arranged according to the difficulty level. For business expert these competencies are the abilities, ripped, mastered by a young entrepreneur who is already in the field. There are differences in opinion of these experts within the field of business enterprises. This may due to the difference in the perspective in terms of the size of the organization. The size of the organization may vary from a small single unit to a very wide multifaceted organization. The Business Competencies perceived by person working in a single unit organization may differ from an expert working in multifaceted institution (Glenn, D. 2011). In the context of educational institutions, the competencies are considered more from
theoretical perspective whereas in organisational context the focus is more on the execution level (Barnett R.1994). The organization plan, impart systematic and conscious training programme to draw out the best from employees to undertake wide range of tasks expected to face in professional environment where as the school curriculum is found to be traditional outlook even though there is scope for need based curriculum for business students (Glenn, D. 2011).

However, the basic elements of competencies constitute the core of business that required fostering business behaviour in business subjects and the same have been considered in the present study.

7.7.2 Discussion and Interpretation of the Findings related Objective Two

The second objective of the present study was “To study the status of Business competencies among the plus two students”. The analysis concluded that Majority of the students at plus two level are found to be at average level in relation to Business Competencies. The findings of the research evidenced that though students are taught ‘business studies as a subject at plus two level classes, the application of the subject is poor among majority. (Doria, Rozanski, and Cohen, 2003, Natarajan, 2003, Doria et al 2003, Economic Times, Feb 7, 2003 and Economic Times (2003). This situation might be aroused from the fact that students lack basic business competencies through curriculum transaction. (Coll & Zegwaard 2006).

It is also noted that students are often not prepared for the future and the existing system of education focuses certification rather than building competencies (Barrie, 2006; Kember & Leung, 2005) without providing transferable skills that can be applied in practical life situation (Smith, Clegg, Lawrence & Todd, 2007). Students acquire subject more at knowledge level (Crebert, Bates, Bell, Patrick & Cragnolini, 2004; Hind, Moss & McKellan, 2007). It does not develop their competencies such as interpersonal skills, leadership, teamwork, communication and problem solving skills. Therefore no value will be added to their intellectual capabilities making them capable in their future (Hind et
al., 2007; Maher & Graves, 2007). This lack of focus on the practical and competency based education may be one of the causes of present dissatisfactory status of Business competencies at plus two level.

This finding was also supported by number of studies. Average level of business competencies among the plus two level students may be due to the existence of traditional set up in the teaching learning methods. Competency based education in global education scenario is not encouraged as per the demand. Though changes are demanded in the school curriculum transactions required in the global educational scenario (Yorke & Harvey 2005), significant focus on the development of competency based education by higher education institutions are found to be insufficient (Rainsbury, Hodges, Burchell & Lay 2002).

It is also noticed that lack of integration and conceptualization of competencies in the existing curriculum of business education leads to poor performance of students (Bath, et al., 2004). The role of ineffective teachers might have contributed a share for the poor performance of students as the faculty was not mindful towards all attempts to introduce the attributes of business competencies into the curriculum (Barrie 2006). This issue of insufficient learning input was tackled in the present study by giving an intervention using a Specially Designed Instructional Package involving Constructivist Approach. The results of the present study proved to be effective in fostering Business Competencies. This revealed that a special intervention may result in fostering the academic status of plus two students with reference to Business Competencies.

7. 7.3 Discussion and Interpretation of the Findings related Objective Three

The third objective of the study was “to study the relationship between different variables related to the study. They are a) Business Competencies and Business Aptitude b) Business Competencies and Business Achievement.

In order to study this objective, the data was collected from 300 plus students of Thrissur district. The study concluded that,
i. There is a significant relationship between Business Competencies and Business Aptitude among plus Students.

ii. There is a significant relationship between Business Competencies and Business Achievement of plus students.

(i) Business Competencies and Business Aptitude

The present study concluded that there exists a significant relationship between Business Competencies and Business Aptitude among Plus Two Students. This finding is supported by number of studies. The significant relationship between business competencies and business aptitude indicates that aptitude is considered as the primary indicator of student’s ability to carry out a particular course of action (Michael Siegenthaler 2011, Rituraj Kumar 2011). Studies implied that aptitude enables individual to realise new ideas and feasible business opportunities (Mathew c. Sonfield 2010, Serena Cubica 2010). It was found that aptitude has the criteria for differentiating businessmen and non-businessmen. It was found from the results that aptitude is closely associated with business experiences and students from business family develop more business aptitude (Michael L. Harries 2008). Research in parallel studies have been identified that the most important applications of aptitude test is ability to predict student achievement and future outcomes (Brown, Reynolds, & Whitaker, 1999; Weiss & Prifitera, 1995).

There are studies which concluded that students who who lack aptitude in business educational programmes do not match their occupational field of interest (Renz Mallorca 2008). These studies supported to the findings of the present study abd Business Aptitude was considered as one of the co-variates in the experiment.

ii. Business Competencies and Business Achievement

The present study concluded that there exists a significant relationship between Business Competencies and Business Achievement among Plus Two Students. The significant relationship between Business Competencies and
Business Achievement revealed that probably the most important connection between Business Competencies and Business Achievement is the impact of business environment wherein students get knowledge about business. Number of studies has supported the present findings of the study. (Affaires et al Commerce, 2006, Ove C. Hansemak 2003, Renninger, K. A. 1998, Ruble, D. N. & Martins, C. L.1998, Federal Ministry of Education 2007). Studies revealed that promoting competencies leads to greater achievement in one’s life (Henk J M and Van Berkel 2003). Results highlighted that that competency is the key element for achievements in academic performance (Savage, L. 1993 and Schneck, E.A. 1978). and this study indicated that the concept in business studies provided students with a new, practical context for many of the subjects they studied at the primary school level including mathematics, science, language and social studies and this has enabled students to recognize the relevance of these subjects as they are apply to the world of business. A study by Renninger, K. A. (1998) demonstrated a significant relationship between Business Competencies and Achievements. Researchers showed that lack of competence may lead to low achievement in performance. When students have no control of their time, resources, and effort, they are much more unable to balance their work and school successfully (Diane Johnson 2004)

Thus it was concluded that Business competencies are key factors for Business Achievement. Therefore Business Achievement was considered as one of the co-variates in the experiment

7. 7.4 Discussion and Interpretation of the Findings related Objective Six, Seven and Eight

The Sixth objective of the study was “To study the effectiveness of Specially Designed Instructional Package in relation to traditional Approach in fostering selected Business Competencies (Leadership and Communication) among plus two students after adjusting for the initial differences in Business Aptitude and Business Achievement”,

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The Seventh Objective was “To study the effectiveness of specially designed instructional package in relation to traditional Approach in fostering Leadership Competencies among plus two students after adjusting for the initial differences in Business Aptitude and Business Achievement”,

The eighth objective was “To study the effectiveness of specially designed instructional package in relation to traditional approach in fostering Communication Competencies among plus two students after adjusting for the initial differences in Business Aptitude and Business Achievement.

In order to study these objectives two groups were formed based on the scores of Business Achievement Test. Thus group- One of twenty five students was selected for experimental group and the rest twenty five students were considered for control group. The students of control group were allowed to be under the instruction of school teacher. The students of Experiment group were taught by the investigator using Specially Designed Instructional Package based on Constructivist Approach. The study concluded that the experimental treatment is significantly more effective than the traditional treatment for control group in fostering selected Business Competencies including Leadership and communication competencies among plus two students. In other words, the experimental strategy employed to foster Business Competencies among plus two students proved more effective than the traditional method used in the regular classroom.

This experimental treatment was given to the experimental group and the control group was given the traditional treatment. This implies that the instructional package followed in the experimental group has been responsible for the observed result. The findings of the present study revealed that,

Instruction using Specially Designed Instructional Package is significantly more effective than the traditional treatment in fostering Business Competencies including leadership and communication among the Plus Two Level Students.
Instruction using Specially Designed Instructional Package is significantly more effective than the traditional treatment in fostering Leadership Competencies among the Plus Two Level Students.

Instruction using Specially Designed Instructional Package is significantly more effective than the traditional treatment in fostering Communication Competencies among the Plus Two Level Students.

These findings suggested that deliberate efforts in developing Business Competencies through Constructivist Approach led to more significant effects.

The present study fused Constructivist Approach as a way of organising the content which formed the base for the instructional material. The study proved that Constructivist Approach of organising the content contributes for reaching the achievement of the students. Several studies concluded that Constructivist Approach is effective in most of all the fields such as science, (Hmelo-Silver et al 2007, Dogru and Kalender 2007, Jong Suk Kim 2005), Social Science (Ediger, Marlow 2000, National Council for the Social Studies Task Force 1994, and Nuthall, Graham 1999), Educational Technology (Cole, P. & Wilson, B.1991). This may be due to the input students receive under social constructivist method is different from the “traditional” system where students’ needs are not addressed in the connection with the real world situations (Jonassen, 1991). Studies also revealed that the content and skills that the students develop are made relevant to the students under this approach (Doolittle & Hicks, 2001). Constructivist approach allows every learner to get interested in learning, in turn, it causes the students to become more attentive and eager (Ediger, 2000). Constructivist approach also identified that the students become more attentive and make the learning experiences more personal to them as it allows them to feel some ownership and value to the knowledge that they acquired (Borich, 1997).

Studies revealed that Social Constructivism also allows for a majority of the activities and lessons to be student-centred which prepare them for competencies in business studies. Researchers place heavy emphasis on student-centered
instruction in the constructivist pedagogy (Driscoll, 1994). If student-centred actives are employed, the student will begin to develop a greater confidence in his or her knowledge and feel more connected to the work and this is very much required in the field of business. When this happens a teacher can then turn the classroom environment into a “learning community” (Eggen & Kauchak, 1997). A “learning community” creates an atmosphere that is more interactive than that of the “traditional” class, which was ensured by the investigator based on the Constructivist Approach in the present study. This role of environment is very much required in the context of Business Competencies researchers.

There are other reasons also which might have contributed for the success of the present experiment. The limitations of the traditional treatment (Savery, J.R. & Duffy, T.M. 1995) were initially analysed by researcher. It was found by the personal observation of the investigator, that the students were not trained to develop practical competencies required in the areas of business. Everything was taught theoretically by the teacher and students were not encouraged any type of self learning. These limitations were seriously tackled in the present study and avoided by compensating through a Specially Designed Instructional (Package Dick, W. 1991). This might have contributed for the success of experiment. Special attention was given for the students to create situation, get involved in the situation created, identifying the sub components of Business Competencies and develop the same. Constructivist Approach itself has number of advantages that might have contributed for the effectiveness of the package. It allows to get actively involved, concentrates on thinking and understanding, rather than on rote memorization, ownership makes possible in self leaning, create real-world context, develop social and communication skills, gives scope for collaboration on tasks, exchange of ideas, negotiation, problem solving constant assessment and time management.

This implies that present class room management methodology of Business Studies instruction demanded a significant change where the teacher role would shift from a guide to facilitator. The class room environment should begin
to take the shape of learning community for interaction among the members of the class room as a group is only a key (Brown 2000). However, as demonstrated in the present study Constructivist Approach interpreted in specific sequence is more effective in strengthening the academic behaviours of students.

Studies have proved that intervention through Specially Designed Instructional Package may result to prevail over the deficiencies of specific system (Nabi, M.F 2005, Hardwick, J.M. 1993, Pizza, J.M. 1994 and Thompson, T. 1995) as it triumphing over limitations of the contemporary situations.

7.7.5 **Discussion and Interpretation of the Findings related Objective Nine, Ten and Eleven**

The Ninth objective was “To study the variational effect of Specially Designed Instructional Package intended to foster Business Competencies among plus two students with respect to Gender’. The results showed that the experimental treatment showed that there was no differential effect in relation to the post test scores of selected Business Competencies of Boys and Girls. Therefore the Specially Designed Instructional Package can be used equally for the Boys and Girls to foster Business Competencies.

The Tenth objective was “To study the variational effect of Specially Designed Instructional Package intended to foster Leadership Competencies among plus two students with respect to gender’. The finding was the experimental treatment showed that there was no differential effect in relation to the post test scores of Leadership Competencies of Boys and Girls. Therefore the Specially Designed Instructional Package can be used equally for the Boys and Girls to foster Leadership Competencies.

The Eleventh objective was “To study the variational effect of Specially Designed Instructional Package intended to foster Communication Competencies among plus two students with respect to gender’. The results showed that The
experimental treatment showed that there was no differential effect in relation to the post test scores of Communication Competencies of Boys and Girls. Therefore the Specially Designed Instructional Package can be used equally for the Boys and Girls to foster Communication Competencies.

In the context of these major findings, the package involving Constructivist approach required selected Business competencies. This to develop leadership competencies viz., Self Management, Taking Initiative Problem solving, Self Confidence, Negotiation, Risk taking, Personal Integration, Managing People. And communication Competencies namely, Active listening, Spontaneity, Understanding, Accuracy, Trust building, Team Building and Motivation. Studies have found that there is no difference between boys and girls in relation to many of these behaviours. (Ajitha K. 2012, Alizabeth George 2012, Boorks, J. and Brooks, M.G (1993). This has been led to the present research the significant input in the form of specially designed instructional material resulted in development of expected Competencies.

This implies that there are no difference in behaviour of boys and girls leading to the development of Leadership competencies and communications Competencies. Number of studies have proves that there is no difference between boys and girls in relation to the components self confidence, team building and motivation and personal integration which are the components of Leadership and Communication Competencies. However, there are studies which reveals a difference among boys and girls in relation to the components behaviour of Leadership and Communication Competencies (Bolman, L. G., & Deal, T. E., 1992, Druin, G., & Butler, J. A., 1987, Fears, A. A., 2004).

This demanded further studies to be undertaken in the field to arrive at more valid results.
7.7.6 Discussion and Interpretation of the Findings related Objective Twelve

The Twelfth objective of the study was, to study whether there is any significant difference between the pre-test and post test scores of Experimental Group on Business Competencies. It was concluded that there is a significant difference between the means of scores of pre-test and post test of Experimental group on Business Competencies.

As discussed before the Experimental Group was given a Special treatment. The same was absent for in the control group were instructed by the regular teacher in the traditional way. The investigator basically selected this as an objective was the study, because it was understood that there is some lack in the total system of Instruction. The Experimental Group was facilitated to gain the Competencies by taking care of all the requirements demanded by the situation. It is obvious that Control Group was continued with the previous input and hence was not able to demonstrate much difference in terms of Competencies related to Business Studies. The Experimental Group was instructed using Specially Designed Instructional Package were all the requirements for the development of Competencies were taken care of. This significant input in the form of specially designed Instructional Package resulted in development of Expected Competencies. Number research studies have demonstrated that a specially focussed, purposeful deliberate instruction may result in bringing out expected results (Bransford, J. D., Brown, A. L. & Cocking(2000), Poole, D. M.(2000), Khadar, M.A.(2005) , Hill Anna (2010), Clara Vasconcelos (2012), Tsapatori Eleni et al (2009), Shrama, Santhosh (2006), Beachey, W.D.(2004).

7.8.0 Educational Implications of the Study

The package prepared by the investigator is found to be more effective in fostering Competencies related to Business Studies among the Plus Two Level students in Thrissur District. Thus this implies that the approach of the Specially Designed Instructional Package and the method used for the same treatment is
more effective than the usual classroom approaches. On the basis of the findings, the following implications for education can be identified for the present study:

1. Initiation exercise needs to be thought of in the process of fostering the Business Competencies.

2. The students need to be prepared with the scaffolding activities.

3. Inbuilt evaluation technique will prove better effect.

4. Constructivist approach can be followed to foster Competencies related to business Studies at plus two level.

5. As the level of competencies among the plus two level students is found to be at average level, appropriate inputs have to be planned in Business Studies curriculum to foster Business Competencies. Curriculum should emphasize the need for acquisition of knowledge through active involvement with content and not mere memorization of knowledge.

6. Reflective and explorative role of teacher should help the students to explore their own realm of learning in order to provide necessary experience in the exploration of knowledge to the students at plus two level.

7. The present study revealed that the primary role of teacher is not only to lecture and explain but also to make an attempt to transfer factual knowledge to create situation for students that will foster the necessary mental construction at plus two level. Therefore scope should be made in the curriculum of Business Studies to transfer factual knowledge to real life situation.

8. The present study revealed that knowledge is not only simply constructed but also co-constructed. The presence of peers who is more knowledgeable in the group will help to interact with one
another in a social situation. Thus this will develop the spirit of group work. Therefore the group learning situations like co-operative learning should be provided to students in Business Studies class.

9. Assessment methods must take into account the level of actual development of every student. Thus the right measures can be applied to encourage students in order to achieve their full potential.

10. The learning content should be framed in terms of activities and with scope to perform the required task of Business Studies.

11. The competencies required of teachers to follow constructivist approach, like resourcefulness, ability to transfer knowledge into practice should be developed among the teachers through workshop and training programmes.

12. Evaluation followed in the present study is more of observation and process oriented. Business Study classroom should take the form of evaluation based on observation.

13. Construction and implementation of activities in a constructive manner is the core of presently used package. Therefore a number of activities need to be thought of by teachers to make Business Studies class more effective.

7.9.0 Limitations of the Study

1. In the present study only two areas of Business Competencies have been focused while preparing instructional materials.

2. The study has been restricted only to the population of Thrissur District.

3. The experiment has been tried with a limited number of students.

4. Only two covariates have been controlled in the study.
7.10.0 Suggestions for Further Research

1. A study can be undertaken extending the approach of the Specially Designed Instructional Package to foster Competencies of Business Studies other than Leadership and Communication.

2. A study can be undertaken to test the effect of the approach of the Specially Designed Instructional Package through constructivism in other subjects in Higher Secondary Level.

3. The study can be extended to larger population and the effectiveness can be found.

4. A study on developing competencies required of teachers to develop Business Competencies can be undertaken.

5. Parallel Specially Designed Instructional Package can be developed through studies for higher class in Business Studies.