CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The main purpose of this study is to investigate the application of co-operative learning activities to culturally diversified students in an institution of higher learning and to see how it can improve academic achievement and interaction. This chapter will outline some research and literature on co-operative learning.

2.1 What is Co-operative Learning

According to Johnson, Johnson and Holubec, (1994): "Co-operative learning is the instructional use of small groups through which students work together to maximise their own and each others learning".

Co-operative learning allows the positive growth in a group of students as it builds positive interdependence (a sense of sink or swim together), individual accountability (each of us has to contribute and learn), improves interpersonal skills (communication, trust, leadership, decision making, and conflict resolution), face-to-face encounters encouraging interaction and processing (reflecting on how well the team is functioning and how to function even better).

Students work together to maximise their own and each other's learning abilities. Co-operative learning experiences are based on students' perceptions that they sink or swim together and that they must provide face-to-face help and support, do their fair share of the work, provide leadership and resolve conflicts constructively. Also, to periodically process how to improve the effectiveness of the group. There is considerable evidence that students will learn more, use higher level reasoning strategies more frequently, build more complete and complex conceptual structures, and retain information learned more accurately when they learn within co-operative groups than when they study competitively or individually.

2.2. History of Co-operative Learning

Co-operative learning is an old idea. The old Jewish text on civil and ceremonial law and tradition, the Talmud, clearly states that in order to learn you must have a learning partner. In the first century, Quintillion argued that students could benefit from teaching one another. The Roman philosopher, Seneca advocated co-operative learning through such statements as, *Qui Docet Discet* (when you teach, you learn twice). Johann Amos Comenius (1592-1679) believed that students would benefit both by teaching and being taught by other students. In the late 1700s Joseph Lancaster and Andrew Bell made extensive use of co-operative learning groups in England, and the idea was brought to America when a Lancastrian school was opened in New York City in 1806. Within the Common School Movement in the United States in the early 1800s there was a strong emphasis on cooperative learning. In the last three decades of the 19th century.

Colonel Francis Parker brought to his advocacy of co-operative learning enthusiasm, idealism, practicality, and an intense devotion to freedom, democracy, and individuality in the public schools. His fame and success rested on his power to create a classroom atmosphere that was truly cooperative and democratic. Parker's advocacy of cooperation among students dominated American education through the turn of the century. Following Parker, John Dewey promoted the use of co-operative learning groups as part of his famous project method instruction. In the late 1930's, however, interpersonal competition began to be emphasized in schools and in the late 1960s, individualistic learning began to be used extensively. In the 1980s, schools once again began to use cooperative learning.

2.3 Types of Co-operative Learning

Within co-operative learning, there are three specifications. They are:

2.3.1 Formal Co-operative Learning

Students work together, for one class period at a minimum to a maximum of several weeks, to achieve shared learning goals and complete jointly specific tasks and assignments such as decision making or problem solving, completing a curriculum unit, writing a report, conducting a survey or experiment, or reading a chapter or reference book, learning vocabulary, or answering questions at the end of the chapter (Johnson, Johnson, & Holubec, 1993). Any course requirement or

assignment may be reformulated to be co-operative. In formal co-operative learning groups teachers should specify the objectives for the lesson, make a number of pre-instructional decisions, explain the task and the positive interdependence, monitor students' learning and intervene within the groups to provide task assistance or to increase students' interpersonal and group skills and assess students' learning and helping students process how well their groups functioned.

2.3.2. Informal Co-operative Learning

Students work together to achieve a joint learning goal in temporary, adhoc groups that last from a few minutes to one class period. Informal co-operative learning can be used to focus student attention on the material to be learned, set a mood conducive to learning, help set expectations as to what will be covered in a class session, ensure that students cognitively process the material being taught and provide closure to an instructional session.

During direct teaching the instructional challenge for the teacher is to ensure that students do the intellectual work of organising material, explaining it, summarizing it, and integrating it into existing conceptual structures. Informal cooperative learning groups are often organized so that students engaged in three-to-five minute focused discussions before and after a lecture and two-to-three minute turn-to-your-partner discussions interspersed throughout a lecture.

2.3.3. Co-operative Base Groups

These are long-term heterogeneous cooperative learning groups with stable membership (Johnson, Johnson, & Holubec, 1992; Johnson, Johnson, & Smith, 1991). The purposes of the base group are to give the support, help, encouragement, and assistance each member needs to make academic progress (attend class, complete all assignments, learn) and develop cognitively and socially in healthy ways. They are permanent (lasting from one to several years) and provide the long-term caring peer relationships necessary to influence members consistently to work hard in school. They formally meet to discuss the academic progress of each member, provide help and assistance to each other, and verify that each member is completing assignments and progressing satisfactorily through the academic program. Base groups may also be responsible for letting absent group members know what went on in class when they miss a session. Informally, members interact every day within and between classes, discussing assignments, and helping each other with homework. The use of base groups tends to improve attendance, personalize the work required and the school experience, and improve the quality and quantity of learning. The larger the class or school and the more complex and difficult the subject matter, the more important it is to have base groups. Base groups are also helpful in structuring homerooms and when a teacher meets with a number of advisers.

To ensure that co-operative learning works, it is also important to structure teachers/lecturers into co-operative teams. Therefore the whole school is on the concept of "co-operative" to maximize greater yield.

2.4 Elements of Co-operative Learning

Co-operative efforts are expected to be more productive when five basic elements are included. They are:

Positive Interdependence: Positive interdependence is the perception that you are linked with others in a way so that you cannot succeed unless they do (and vice versa), that is, their work benefits you and your work benefits them. It promotes a situation in which students work together in small groups to maximize the learning of all members, sharing their resources, providing mutual support, and celebrating their joint success. Positive interdependence is the heart of cooperative learning. Students must believe that they sink or swim together. Within every cooperative lesson positive goal interdependence must be established through mutual learning goals (learn the assigned material and make sure that all members of your group learn the assigned material). In order to strengthen positive interdependence, joint rewards (if all members of your group score 90 percent correct or better on the test, each will receive 5 bonus points), divided resources (giving each group member a part of the total information required to complete an assignment), and complementary roles (reader, checker, encourager, elaborator) may also be used. For a learning situation to be co-operative, students

must perceive that they are positively interdependent with other members of their learning group. It is positive interdependence that creates the overall goals that unites diverse students into a common effort. It is also positive interdependence that results in a joint super ordinate identity. Students need to develop a unique identity as an individual, a social identity based among other things on their ethnic, historical, and cultural background, and a reinforced identity that unites them with all the other members of their society. At the same time they need to understand the social identity of classmates and respect them as collaborators and friends. This furthermore, underlies a common culture that defines the values and nature of the society in which the students live.

ii. Individual Accountability: Individual accountability exists when the performance of each individual student is assessed and the results are given back to the group and the individual. It is important that the group knows who needs more assistance, support, and encouragement in completing the assignment. It is also important that group members know that they cannot "hitch-hike" on the work of others. The purpose of co-operative learning groups is to make each member a stronger individual in his or her right. Students learn together so that they can subsequently perform higher as individuals. To ensure that each member is strengthened, students are held individually accountable to do their share of the work. Common ways to structure individual accountability include (a) giving an individual test to each student, (b) randomly selecting one student's product to represent the entire group, or (c) having each student explain what they have learned to a classmate.

iii. Face-To-Face Promotive Interaction: Once teachers establish positive interdependence, they need to maximize the opportunity for students to promote each other's success by helping, assisting, supporting, encouraging, and praising each other's efforts to learn. There are cognitive activities and interpersonal dynamics that only occur when students get involved in promoting each other's learning. This includes orally explaining how to solve problems, discussing the nature of the concepts being learned, teaching one's knowledge to classmates, and connecting present with past learning. Accountability to peers, ability to influence each other's reasoning and conclusions, social modeling, social support, and interpersonal rewards all increase as the face-to-face interaction among group members increase. In addition, the verbal and nonverbal responses of other group members provide important information concerning a student's performance. Silent students are uninvolved students who are not contributing to the learning of others as well as themselves. Promoting each other's success results in both higher achievement and in getting to know each other on a personal as well as a professional level. To obtain meaningful face-to-face interaction the size of groups needs to be small (2 to 4 members). Finally, while positive interdependence creates the conditions for working together, it is the actual faceto-face interaction in which students work together and promote each other's success that the personal relationships are formed that are essential for developing pluralistic values.

iv. Social Skills: Contributing to the success of a co-operative effort requires interpersonal and small group skills. Placing socially unskilled individuals in a

group and telling them to cooperate does not guarantee that they will be able to do so effectively. Persons must be taught the social skills for high quality cooperation and be motivated to use them. Leadership, decision-making, trust-building, communication, and conflict-management skills have to be taught just as purposefully and precisely as academic skills. Procedures and strategies for teaching students social skills may be found in Johnson (1991, 1997) and Johnson and Johnson (1997). Finally, social skills are required for interacting effectively with peers from other cultures and ethnic groups.

Group Processing: Group processing exists when group members discuss how well they are achieving their goals and maintaining effective working relationships. Groups need to describe what member actions are helpful and unhelpful and make decisions about what behaviours to continue or change. Students must also be given the time and procedures for analyzing how well their learning groups are functioning and the extent to which students are employing their social skills to help all group members to achieve and to maintain effective working relationships within the group. Such processing (a) enables learning groups to focus on group maintenance; (b) facilitates the learning of social skills; (c) ensures that members receive feedback on their participation; and (d) reminds students to practice collaborative skills consistently. Some of the keys to successful processing are allowing sufficient time for it to take place, making it specific rather than vague, maintaining student involvement in processing, reminding students to use their social skills while they process, and ensuring that clear expectations as to the purpose of processing have been communicated.

Finally, when difficulties in relating to each other arises, students must engage in group processing and identity, define, and solve the problems they are having working together effectively.

In order to effectively use co-operative learning teachers must understand the nature of cooperation and the essential components of a well-structured cooperative lesson. Understanding what positive interdependence, promotive interaction, individual accountability, social skills and group processing are, and developing skills in structuring them, allow teachers to (a) adapt cooperative learning to their unique circumstances, needs, and students and (b) fine-tune their use of cooperative learning to solve problems students are having in working together.

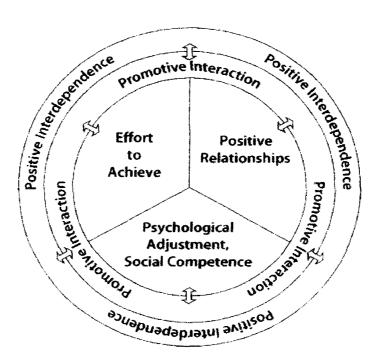


Figure 2.1: Outcomes of Co-operation Source: Johnson & Johnson (1989)

Figure 2.1 shows the bi-directional relationship among achievement, the quality of interpersonal relationships and psychological health (Johnson and Johnson 1989). Each influences the others. Caring and committed friendships come from a sense of mutual accomplishment, mutual pride in joint work and the bonding that results from joint efforts. As caring increases, feeling of personal responsibility to do one's share of the work increases.

This joint success experienced enhances social competencies, self-esteem and general psychological health. This creates positive interpersonal relationships. Through the internalisation of positive relationships, direct social support, shared intimacy and expressions of caring, psychological health and the ability to cope with stress are built. The more psychologically healthy individuals are, the more they can build and maintain meaningful and caring relationships which can lead to a confident self.

2.5 Co-operative Learning Methods

There are many co-operative learning methods. The most widely used are explained here. Implementation of co-operative learning methods has to be in accordance to the teaching and learning objectives that needs to be achieved to meet the students need. Some of the methods can be categorised as follows.

Student Team Learning

This method emphasizes the use of team goals and team success. It can only be achieved, if all the team members learn the objectives being taught. The students task are not to do something as a team but to learn something as a team. Three important concepts to this method is team rewards, individual accountability and equal opportunities for success. Under this, there are five principal methods. They are as follows:-

i. Student Teams – Achievement Divisions (STAD)

Students are in four member learning teams, mixed in performance level, gender and ethnicity. Teacher presents a lesson, students work within their group. All members have to master the lesson and undertake individual quizzes on the material usually conducted over three to five class periods. This is applicable for all subjects.

ii. Teams-Games-Tournaments (TGT)

It is the same as in STAD but instead of quizzes it replaces with weekly tournaments where students play academic games with members of other teams to contribute points to their team score.

iii. Jigsaw II

Students work in four member heterogeneous teams. Students are assigned materials to read. Each member is randomly assigned to become an "expert" on some aspect of the reading assignment. After reading the material, experts from different teams meet to discuss common topics and then teach their topics to their team members. Finally an assessment will be conducted.

iv. Team Accelerated Instruction (TAI)

This uses four member mixed ability learning teams. Students enter an individualized sequence according to a placement test and then proceed at their own rates. In general, members of a team work on different units. Team-mates check each other's work using answer sheets and help one another with any problems. Final unit tests are taken without team-mate help and are scored by student monitors. Each week, teachers total the number of units completed by all team members and give certificates or other team rewards to teams that exceed a criterion score based on the number of final tests passed with extra points for perfect papers and completed homework.

v. Co-operative Integrated Reading And Composition (CIRC)

CIRC is a comprehensive program for teaching reading and writing.

Teachers use novels or basal readers. They may or may not use reading groups, as

in traditional reading classes. Students are assigned to team composed of pairs of students from two or more different reading levels. Students work in pairs within their teams on a series of cognitively engaging activities, including reading to one another, making predictions about how narrative stories will be resolved, summarizing stories to one another, writing responses to stories, and practicing spelling, decoding, and vocabulary. Students also work in their teams to master the main idea and other comprehension skills. In most CIRC activities, students follow a sequence of teacher instruction, team practice, team pre-assessments, and quiz. Students do not take the quiz until their team-mates have determined that they are ready.

2. Round Robin

This method is used for small group of four to six students. Group activity requires every member of the group to talk as their turn arrives to share the information. This method is used so that the students can share their views such as making hypothesis, train the student to listen and be active in the learning process.

3. Three-Step-Interview

It is implemented with student's in-group of four to six students. They will be in pairs and interview each other. After that everybody is required to share the information to the group.

4. Think-Pair-Share

First step in this method requires each individual to think individually about the assignment given, and after that each student have to find their pair and share the information, and than share it with the class. This method has similarity in Think-Pair-Four (the only differences is in Thin-Pair-Four it is in groups of four students). This method is recommended by Jacobs, Lee and Ball (1998). This method involves the student to be active, make revision on hypothesis, to think inductively and deductively and to apply their views.

5. Team Word-Webbing

Every body in the group is required to write main idea, additional idea on the mahiong paper or white board. After that they are required to synthesis the written ideas.

6. Number Head Together

Every student is required to take a number, and the teacher will ask one question. The student is required to find a student who has then the same number to discuss the question. The teacher will then say one number and question the student. The purpose of this method is to test the student's friend/partner's knowledge.

7. Inside-Outside-Circle

Student will be stand in pairs in an overlap circle. The student in the inner circle will face the student in the outer circle to share the information. After that the student in the outer circle will move so that they can meet the other inner circle student. The benefit of this method is to test the understanding of sharing and meeting different classmates.

8. Roundtable

This method requires student to write the answer or information on the given paper. This method is to evaluate the previous information, training skill and remembrance. This gives chance of involvement to all students.

9. Partners

In this method students are required to comprehend the content of an assignment and discuss with other partners. After that they share the result or comprehension with other partner in the group if they have more than one pair in the group.

Every student in the group has several chips (two or three). Student need to speak to give a chip to other student, it will go on till every student finishes their chip, and can be repeated again. This gives chance for everybody to speak.

11. Colour-coded or co-op card

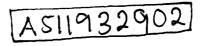
Student has to memorise fact using flash card. The purpose of this game is to improve short-term memory to the long-term memory. Marks are given based on improvement. The purpose of this game is to facilitate memorising fact.

12. Pairs Check

A group of four students will be segregated to two pairs. Every pair will be given an assignment. If A has problem, B will help and vice versa. After solving the two problems the first pair will compare the answer or the solution with the second pair.

13. Match-Mine

Student can fix the object sequence made by one of the student based on oral communication. This method increases communication skills.



14. Group Investigation

Sharan and Sharan (1992) developed Group Investigation. This is a general classroom organisation plan in which students work in small groups of two to six members using co-operative inquiry, group discussion and co-operative planning projects. Groups choose the topics from a unit, break it into individual tasks and carry out the activities necessary to prepare group reports. Each group presents its findings to the entire class.

15. Learning Together

Johnson and Johnson, 1987; Johnson, Johnson & Smith, 1991 researched this method. It involves students working in four or five members from a heterogeneous group on assignment sheets. The group hand in a single sheet, and receive praise and rewards based on the group product.

16. Complex Instruction

Elizabeth Cohen (1986) developed and researched approaches to cooperative learning that emphasises use of discovery – oriented projects. The main focus is on building respect for all of the abilities students have. Projects in Complex Instruction require a wide variety of roles and skills and teachers point out how every student is good at something that helps the group succeed. This is used in bilingual education and in heterogeneous classes.

17. Structured Dyadic Methods

Research shows how scripted pair learning, in which students take turns as teacher and learner, to learn procedures or extract information from text can be very effective in increasing student learning (Dansereau, 1988).

Co-operative learning methods differ in many ways but they can be categorized to six principal characteristics. They are (a) group goals whereby some form of recognition is given, (b) individual accountability where each student is given a unique responsibility for part of the group and group scores will be the sum or average of individual quiz scores or other forms of assessments, (c) equal opportunities for success which ensures all students undertake an equal opportunity to contribute to their teams, (d) team competition which is a means of motivating students to co-operate within teams, (e) task specialization where a unique subtask is given to each group member and (f) adaptation to individual needs whereby instruction is adapted to students' individuals needs.

2.6 Co-operative Learning and Student Achievement

The important goal of co-operative learning is to provide students with the knowledge, concepts, skills and understanding students need to become happy and contributing members of our society. Research on co-operative learning has shown how these strategies can enhance student achievement and most

importantly the elements of co-operative learning that must be in place to achieve maximum effect.

Researchers have suggested a wide range of theoretical models to explain the superiority of co-operative learning (Slavin 1992, 1993). They can be categorized into motivational and cognitive theories.

Co-operative learning primarily focuses on reward or goal structures. Deutsch (1949) identified three goal structures: co-operative, goal attainment and individualistic (Johnson et al., 1981, and Slavin, 1983a). Co-operative goal structures creates a situation whereby members can only attain their personal goals only if the group is successful. Therefore members must help members and encourage them to succeed. Thus, rewarding groups based on group performance creates an interpersonal reward structure. (Slavin 1983a).

Research by Deutsch, 1949; Thomas, 1957 indicates that when students work together to accomplish a group goal, they come to express norms in favour of doing whatever is necessary for the group to succeed.

Hulten and DeVries (1976), Madden and Slavin (1983a), and Slavin (1978b) research highlights that students in a cooperative learning class felt that their classmates wanted them to learn. Learning becomes an activity that gets students ahead in their peer group. Slavin (1975) and Slavin, DeVries, and Hulten (1975) found that students in co-operative groups who gained in achievement

improved their social status in the classroom. These changes in the social consequences of a academic success is very important.

Coleman (1961) research cites that bright students in schools, in which academic achievement helped a student to be accepted by the "leading crowd" turned their efforts more toward learning.

Brookover, Beady, Flood, Schweitzer and Wisenbaker (1979) indicate that students' support for academic goals was the most important predictor of their achievement. From these researches, we can clearly state that co-operative goals create pro academic norms and these norms have important effect on student achievement.

There are several cognitive theories which emphasize the effects of working together. They are broadly categorized into development theory and cognitive elaboration theories.

The basic assumption of the developmental theories is that interaction among children around appropriate tasks increases their mastery of critical concepts (Damon, 1984; Murray, 1982).

Vygotsky (1978) defines the zone of proximal development as "the distance between the actual developmental level as determined by independent

problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. According to Vygotsky, collaborative activity promotes growth, when similar age groups are operating within one another's proximal zones of development. This development is more advanced than those they could perform as individuals because of modeling in the collaborating group behaviours.

Piaget (1926) held that social-arbitrary knowledge – language, values, rules, morality and symbol systems can only be learned in interactions with others. Many studies have shown that when conservers and non conservers of the same age work collaboratively on tasks requiring conservation, the non conservers generally develop and maintain concepts (Bell, Grossen, and Perret – Clermont, 1985; Murray, 1982; Perret – Clermont, 1980). Ames and Murray, 1982; Mugny and Doise, 1978 conducted studies which found members of disagreeing non conservers pairs on conservation problems, gained in conservation. Kuhn (1972) highlights that small difference in cognitive level among peers is more conducive to cognitive growth than a larger difference.

Based on the above findings, it can be stated that interaction among students on learning tasks, can lead to improved student achievement and higher quality understanding will emerge due to discussions of content, cognitive conflicts and reasoning.

Research highlights that for information to be retained in memory and relates to information already in memory, the learner must engage in some sort of cognitive restructuring or elaboration of material. Explaining material to someone else is an effective way of elaboration. In a series of studies conducted by Donald Dansereau (1985) and his colleagues, they found that students working on structured "co-operative scripts" learnt technical material or procedures better than students working alone. Further supported by Dansereau (1988), it cities that the recaller learned more than the listener. Webb's (1985) findings also reinforces that the students who gained most from co-operative activities were those who provided elaborated explanation to others. The conclusion drawn from these findings are students who received elaborated explanations learned more than those who work alone.

2.7 Co-operative Learning and Outcomes other than Achievement

Co-operative learning does not only increase student achievement but is also a way to create a happy and pro social environment in the classroom. This benefits a wide variety of interpersonal and affective outcomes. Some outcomes are highlighted here.

2.7.1 Intergroup Relation

The major barrier to friendship and respect is still ethnicity. Gordon Allport in *The Nature of Prejudice* (1954) cited evidence that when individuals of

had opportunities to get to know one another as individuals, and when they worked with one another on an equal footing, they became friends and will not hold prejudices against one another.

Generally in the classroom, students sitting side by side of different race or ethnic background, will less likely to interact and their contact will be superficial. Co-operative learning provides the opportunity for intense interpersonal contact between students of different races, when the teacher assigns work for each group. In this way interethnic interaction is achieved. This has a profound impact on inter group relations.

2.7.2 Self-Esteem

The most important psychological outcome of co-operative learning methods is their effect on student self-esteem. This affects the students' belief, which is that they are valuable and important individuals, are of critical importance for their ability to withstand the disappointments of life, to be confident decision-makers, and ultimately to be happy and productive individuals.

Two of the most important components of students' self-esteem are the feeling that they are well liked by their peers and the feeling that they are doing well academically. Students typically named as friends by more of their classmates, feel more successful in their academic work, and in fact achieve more

than they do in traditional classrooms. Co-operative learning increases students' self-esteem.

In Jigsaw, students are made to feel important because they have information that is indispensable to the group. Blaney, Stephan, Rosenfield, Aronson, and Sikes (1977), Geffner (1978), Lazarowitz, Baird, Bowlden, and Hertz-Lazarowitz (1982), and Lazarowitz et al. (in press) found positive effects of Jigsaw on student self-esteem.

Johnson, Johnson, and Scott (1978) found that students who had worked in groups were more likely than individualistically taught students to agree that "I'm doing a good job of learning". Johnson and Johnson (1983) found that cooperation increased students' general self-esteem more than competition.

However, the evidence concerning co-operative learning and self-esteem is not completely consistent. In eleven of the fifteen studies in which the effects of co-operative learning on self-esteem were studied, positive effects on some aspect of self-esteem were found. The effects of co-operative learning on student self-esteem are probably specific to the settings in which they were obtained. However, these results do suggest that if co-operative learning methods were used over longer periods as a principal instructional methodology, genuine, lasting changes in student self-esteem might result.

Proacademic Peer Norms

One of the most important tenets of motivational theories of co-operative learning is that co-operative goals create peer norms that support high achievement. Co-operative incentives motivate students to try to get each other to do academic work and gets students to feel that their classmates want them to do their best.

Research by Coleman, 1961; Brookover, Beady, Flood, Schweitzer, and Wisenbaker, 1979 cite normative forces to be powerful influences on student achievement. Deutsch's (1949) research on college students who discussed human relations problems under co-operative conditions results indicate that in the co-operative groups, students wanted to achieve because their group mates wanted to.

In conclusion, it can be stated that the breadth of the outcomes affected by co-operative learning is impressive. Not every study has had positive effects but the overall effects of co-operative learning on student self-esteem, peer support for achievement and co-operation are positive.

Many researches, results and findings have established that having students work together co-operatively is a powerful way for them to learn and has positive effects in the classroom. The importance of emphasising co-operative learning in classrooms goes beyond just achievement, positive relationships and psychological health. The ability for all students to work co-operatively with

others is the keystone to building and maintaining stable marriages, families, careers and friendships. Being able to perform technical skills such as reading, speaking, listening, writing, computing and problem solving are valuable but of little use if the person cannot apply those skills in co-operative interaction with other people in career, family and community environments. Co-operative efforts promote productivity, interpersonal relationships; promote perspective thinking, creativity and produces high levels of self-esteem and academic achievement.

In conclusion it can be stated that co-operative learning activities can be applied in the teaching of Interviewing Skills to improve academic achievement and interaction.

Chapter Three will discuss the methodology and instrumentation to be used in this study.