

"AN ANALYSIS OF EDUCATORS" VIEWS ON THEIR EFFECTIVENESS TO USE GROUP WORK AS A CO-OPERATIVE LEARNING STRATEGY

B Y

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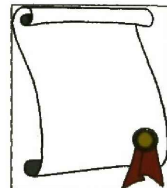
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ABSTRACT

The study was undertaken to analyse educator's views on their effectiveness in using group work as a co-operative learning strategy. Specifically the study aims to:

- To determine through literature the nature of group work as a co-operative learning strategy.
- To find out views of educators in their effectiveness of using group work as a teaching strategy.

The investigation involved 208 educators from middle and secondary schools in Themba District. Close and open ended questionnaires were used for data collection. Results obtained showed that approximately 168 (80.76%) of the educators indicated their preparedness to use group work as a co-operative learning strategy. Results revealed that almost all the educators were willing to use group work as a co-operative learning strategy.

However the study could not conclude that group work as a co-operative learning strategy has been applied effectively. The major problem faced by educators are skills requirements for using the strategy effectively. Other problem areas are:- it is time consuming, lack of participation by learners, lack of learning resources.

The following recommendations have been put forward:

- Pre-service training and in-service training should be made available to educators for the improvement of teaching and learning strategies in group work.
- Educators should be enlightened on how to use group work as an effective strategy. The educators should therefore be trained on the following:
 - theory and philosophy of cooperative learning
 - demonstration of co-operative methods
 - ongoing coaching and collegial support at the classroom level
 - training educators in maintaining product teaching approaches in order to curb useless time consuming activities.

DECLARATION

I declare that the Mini dissertation for the degree of M.Ed at North West University hereby submitted, has not previously been submitted by me for a degree at this or any other university. That it is my own work in design and execution and that all material contained herein has been duly acknowledged.

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CHAPTER ONE

1. ORIENTATION OF THE STUDY

1.1 Introduction.

During the previous decade, education in South Africa experienced a crisis. The crisis was characterised by, among other things, major inequalities in the provision of education, high drop-out and failure rates, relatively poorly qualified educators, examination oriented teaching with a major emphasis on learning by rote and unimaginative teaching methods. All these characteristics were hallmarks that characterized apartheid education. The new democratic dispensation ushered in the new South Africa in 1994 was bound to strive to root out apartheid education and its legacy, thus the introduction of the new curriculum (Steyn and Wilkinson, 1998:203).

The new democratic South Africa is underpinned by reasons that can be well understood which include striving to root out apartheid education and has set the creation of a winning vision of empowered citizens as one of its aims. Hence the introduction of Curriculum 2005, an outcome-based education model. This is a tangible signal of a significant change in the history of education. Educators across the country are faced with great challenges of adapting to the new methodological shift by moving away from content-based methods to learner-centred methods that involve the use of content to develop insight into concepts (Hartshorne, 1992 : 73 – 80).

One of the critical outcomes of curriculum 2005 is the fact that learners should be able to work effectively with others in a team or group (The media in Education Trust, 1997:2). In this teaching and learning strategy, learners are arranged in groups of four to six. Learners work collectively in their groups to accomplish given tasks. In the process, they lend support to each other so that they all have an opportunity to contribute constructively in the gathering, collection and presentation of information as demanded in the various tasks they carry out by them (The media in Education Trust, 1997 : 2).

According to Balkcom (1992:1), group work as a cooperative learning strategy is a successful teaching strategy in which small teams, each with learners of different levels of ability, use a variety of learning activities to improve their understanding of a learning area. Each member of the team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement.

1.2 Statement of the Problem.

According to Reynolds (1994:27), sitting and listening during a lecture may not be physically active but the way people respond mentally to what they hear, making connection with other ideas and experiences is active. The new curriculum focuses on knowledge, skills, attitudes and values which learners should develop rather than the content that they are given by the educator. In order to achieve these competencies, learners need to be involved in the learning process. This means that learners need to spend their time solving problems, making models, designing plans and resolving conflicts, while working in groups. They should also try out ideas, apply knowledge in different contexts as well as understand the information that the educator gave them. The task of the educator is to develop activities that will give the learners the opportunity to gain new knowledge, develop new skills and think about their attitude and values (Department of Education, 1999 : 2).

Pat (1997 : 2), argues that a learner is a most important focus in the educational system. Outcomes emanate from the learners' needs and interests. The learning process is also vital in achieving this goal. The learners talk are active in planning and assessing the learning process. They are engaged in exploring, experimenting, creating, applying and evaluating the ways of learning as well as interacting with the content and concepts they are studying. The educator has to make sure that the basic skills are treated and frequently learned in the context of the appropriate applications.

Teaching strategies should include investigations of local issues where educators and learners solve the problems together. This implies the teaching and learning style which is based on dialogue and interaction, hands-on work, learning in context of environmental problems, issues and process that are in accordance with outcomes-based education as prescribed by curriculum 2005. In teaching and learning style, it is the work of learners to identify and solve problems, work effectively as team members, organize activities, collect, analyze, and evaluate information (Schulze, 1997 : 192).

An efficient way of organising the class is to divide learners into groups. Group learning encourages learners to verbalise and discuss activities, which clarifies their understanding of new concepts and reinforces learning. It enables peer learning and teaching to take place effectively. There are different ways of grouping learners, and all of them are useful at different times (Slavin, 1990 : 40).

Group work as a co-operative learning strategy has emerged as one of the most promising strategies for diverse groups of pupils. Learning activities can be structured competitively, individually and co-operatively. This type of instructional learning occurs when small groups of learners work together to help one another in instructional activities (Lemmer and Squetch 1993 : 83 – 84).

Co-operative learning leads to greater learner achievement. It produces greater learner achievement than traditional learning methodologies (Slavin 1990 : 52 – 54). Slavin in his study found that 63% of the cooperative learning groups analyzed had an increase in achievement. Learners who work individually must compete against their peers to gain praise or other forms of rewards and reinforcements. In this type of competition many individuals attempt to accomplish a goal with only a few winners. The success of these individuals can mean a failure of others. There are more winners in a cooperative team because all members reap from the success of an achievement. Low achieving learners tend to work harder when grouped with higher achieving learners. There is competition among groups in cooperative learning. Some forms of group competition promote cohesiveness among group members and group spirit.

In cooperative learning learners work with their peers to accomplish a shared or common goal. The goal is reached through interdependence among all group members rather than working alone. Each member is responsible for the outcome of a shared goal (Johnson and Roger, 1990 : 26).

It is the researcher's opinion that there is insufficient knowledge on the views of educators regarding the implementation of group work as a co-operative learning strategy.

Hence the questions guiding the researcher in the context of this teaching strategy are as follows:

- What views do educators have in implementing group work as a teaching and learning strategy?
- What abilities do educators have in the implementation of this strategy?
- What are the challenges facing the educators?
- What are the educators' recommendations in the context of effective implementation of group work as co-operative learning strategy?

The researcher's purpose is to find out educators' views on their effectiveness to use group-work as a co-operative learning strategy.

1.3 Hypothesis.

The effective implementation of group work as a co-operative learning strategy creates an effective learning and improves learners performance.

1.4 Aims of the study.

Aim 1: To determine through literature the nature and scope of group work as a co-operative learning strategy.

Aim 2: To determine empirically views of educators in their effectiveness of using group work as a cooperative learning strategy.

1.5 Methods of Research.

1.5.1 Literature Study.

An intensive review and analysis of literature including relevant books, journals, articles and newspaper reports was made.

1.5.2 Empirical Investigation.

1.5.2.1 Questionnaire.

The questionnaire was developed and pre-tested. The aim of the questionnaire was to gather data on views of educators regarding their effectiveness in using group work as a co-operative learning strategy.

1.5.2.2 Population.

The subjects of the study are on Grade 7, 8 and 9 educators in the middle and secondary schools, North West Province, Themba District. Out of the total number of secondary schools in Themba District ($N = 17$) a proportional stratified sampling of 5 schools were selected and out of the total number of middle school in Temba District ($N = 23$) a proportional stratified sampling of 7 schools were selected. Out of 208 questionnaires sent out, only 168 educators responded.

1.5.2.3 Data Analysis.

With the help of statistical consultants of the University of the North West, a computer analysis was employed. The computation of frequencies, percentages, means and t – test was conducted.

1.6 Definition of terms.

The following concepts are used throughout the study and therefore require clarification.

1.6.1 Teaching strategies.

This refers to the means by which an educator attempts to bring about desired learning (Clark and Starr, 1986:49). Basically, methods in teaching concern the educators organizing and using techniques of teaching, subject matter, teaching tools, and teaching materials to meet teaching objectives. Teaching strategies consist of formulating the goals and objectives for teaching, selecting the subject matter and the teaching procedures, evaluating the success of learning activities, and following-up the success and failure. Shortly expressed, teaching strategies include selecting the content and the instructional materials as well as teaching procedures, as they determine to a large extent what learners actually learn (Clark and Starr, 1986 : 49).

1.6.2 Group work as a learning strategy.

Group work as a learning strategy, is regarded as an efficient way of driving learners into groups. It encourages learners to verbalize and discuss activities, which clarifies their understanding of new concepts, and reinforces learning. It enables peer learning and teaching to take place effectively (Outcomes based education, all phases and Grades, 2001-2003: 41).

1.6.3 Co-operative learning.

Cooperation is working together to accomplish shared goals. Within cooperative activities, individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. Co-operative learning is the instructional use of small groups so that learners work together to maximize their own and each other's learning. Class members are organized into small groups after receiving instruction from the educator. Learners work through the assignment until all the group members successfully understand and complete it (<http://www.c/r.c.com/pages/cl.html>: 5).

1.7 Chapter Reading.

Chapter 1: Orientation of the study

Chapter 2: Literature review

Chapter 3: Research methodology

Chapter 4: Data analysis and interpretation

Chapter 5: Summary, findings, recommendations and conclusions

1.8 Summary.

In this introductory chapter, a brief orientation of the study was provided, outlining the problem to be investigated, and formulating the aims of the study. The major focus of the study is to analyse the educator's view on their effectiveness to use group work as a co-operative learning strategy.

CHAPTER 2

2. Literature Review.

2.1 Introduction.

Group work as a co-operative learning strategy has emerged as one of the most promising strategies for diverse groups of learners. This kind of learning occurs when small groups of learners work together and help one another (Lemmer and Squetch , 1993 : 80– 90).

The present view is limited to an investigation of group work as a co-operative learning strategy and the following factors are considered:

- The skills of group work, its implementation and its benefit to the learners.
- Effectiveness of using group work as a co-operative learning strategy.
- Classroom arrangement, time utilization and control of learner's behaviour are included.
- Disadvantages and advantages of group work as a co-operative learning strategy are also discussed.

2.2 Benefits of group work.

Group work is one of the teaching strategies that most educators in this country use and are familiar with without really knowing much about the dynamics of groups and how important group work is in teaching and learning. Group work differs from the old system of education whereby learners achieved outcomes through the efforts of an educator and the practice of rote memorization (Steyn and Wilkinson, 1998 : 205).

According to Balkcom (1992 : 1), group work is one of the most effective teaching strategies that improved academic achievement, behavior and attendance, and increased self-confidence and motivation amongst learners. It is also credited with increasing the liking of school and cooperation amongst classmates. Co-operative learning is also

relatively easy to implement and inexpensive. Reynolds (1994:27) suggested a deliberate paradigm shift away from teaching to learning. The approaches to be used in learners' professional education should be those that are most likely to develop a sense of responsibility, imagination and co-operation that are expected of them in the work place.

According to Rehad et al (1995 : 20-21), an educators' role in the class must be more learner-centered while they are still a source of knowledge. Their role is to create the environment where learners actively learn how to access and develop knowledge rather than just passive recipients. The educator's learning activity must be a participatory model and democratic in behavior to learners. Hence outcome-based education is a learner-centered approach whereby all learners are involved in a creative way.

Group work can help educators to structure classroom activities so that learners will discuss, debate, and wrestle with ideas, concepts, and skills until they thoroughly understand them and bring forth productive learning activities. It is the type of teaching strategy that initiate educators to organize classrooms in which learners care about each other, take responsibility for each other, and learn to appreciate each other regardless of ethnicity and performance disability Outcomes Based Education. (All phases and Grades, 2000-2003 : 76).

2.3 Teaching strategies.

A teaching strategy can be defined as a broad plan of action for teaching and for teaching activities with a view of achieving an aim (Van der Horst and McDonald, 1997: 124). A strategy is a plan of action that outlines the approach you intend to take in order to achieve your learning outcomes. Educators have to be very careful about their lesson objectives, the learning outcomes and the main content of the lesson, before deciding on the broad teaching strategy.

2.3.1 Group work as a teaching strategy.

Group work involves learners sitting together but working on identical or similar tasks on individual bases. It also involves learners working on a collaborative basis. According to Clegg and Billington (1994 : 53) and Foot et al (1994 : 418), this is an academic work set formally by tutors which involves the interaction of learners in small groups of two or more.

Group work is a teaching strategy advocated frequently by educators and it is given prominence in South Africa as an approach to outcome based education. Group work relies on input from learners, and the educator must pass control of some parts of the lesson to them. It is the work of an educator to prepare thoroughly and thoughtfully for teaching, understanding how language mediates learning, catering for cultural, gender, ethnic, language and other differences amongst learners. Group work should be able to create a learning environment in which learners develop strong internal discipline, and through which critical and creative thinking is encouraged (Killen, 2000 : 72). An educator may use small-group work for the whole lesson, or just part of it, but in either case it should be carefully and closely supervised.

2.3.2 When should group work be used as a teaching strategy?

Some learning outcomes can be achieved through group work, others cannot. An educator should always consider what outcomes he wants learners to achieve. The learners themselves should choose and use available resources and the academic content of the lesson before deciding which teaching strategy is likely to be most effective. According to Killen (2000 : 74), examples of situations in which group work might be appropriate teaching strategies are the following:

- When you want learners to exchange ideas and to learn from one another by exploring issues from many perspectives;
- When you want to increase learners' depth of understanding of the course content by having them explore it and discuss their understanding with other learners;
- When you want to improve learners' oral communication skills as they learn curriculum content;
- When you wish to encourage and develop co-operation among learners and develop their respect for others' strength and limitations;
- When you want to enhance learners' motivation and increase their active participation in learning;
- When you want to improve learners problem-solving skills and have them discover that there are multiple solution to problem;
- When you want to concentrate your teaching efforts to a small group while the other learners engage actively in learning;
- When equipment or facilities are limited and group rotation allows learners to use the equipment that is available;
- When you want to teach learners to be self-reliant than being educator- reliant (Killen, 2000 : 74).

2.4 Group work as co-operative learning strategy.

According to Clegg and Billington (1994 : 530), group work is a co-operative learning strategy in which a group of between three to eight learners work together to achieve a common goal. When learners work in small groups independent of the educators but always being able to guide or lead the group, then small group co-operative learning will be occurring. It refers to learners working, learning and gaining feedback from other group members. It is a way of adapting learning and instruction to the individual differences of the learners.

Co-operative learning is a generic term for various small group interactive instructional procedures. Learners work together on academic tasks in small groups to help themselves and their teammates learn together. Co-operative learning methods share the following five characteristics

- Learners work together on common tasks or learning activities that are best handled through group work.
- Learners work together in small groups containing two to five members
- Learners are positively interdependent. Activities are structured so that learners need each other to accomplish their common tasks or learning activities.
- Learners use co-operative, pro-social behavior to accomplish their common tasks or learning activities.
- Learners are individually accountable or responsible for their work on learning ([http:// www .utc, edu /Teaching Resource Center / Coop Lear .html](http://www.utc.edu/Teaching Resource Center / Coop Lear .html) : 3).

2.5 Planning and preparing for co-operative learning strategy as a teaching strategy.

These are steps to follow when planning and preparing for co-operative learning strategy (Van der Horst and McDonald, 1997 : 133-136).

2.5.1 Choosing appropriate content.

One of the primary tasks for educators is choosing the content that is appropriate for learners. Without an interesting and appropriately challenging content, a co-operative lesson can easily become a failure. To determine the appropriateness of the learning content, learners must have some prior contact with the learning content or will require extended explanation from the educator. An educator should use the text that provides sufficient information on the topic. The STAD or the Jigsaw lessons could be used by an educator to learn objective quizzes that can be administered or assessed quickly (Van der Horst and McDonald, 1997 : 133).

2.5.2 Forming learner teams.

An educator has to decide how learning teams have to be formed. This task will vary with the objectives and the learner outcomes that the educator has prepared for particular lessons, the racial and ethnic mix and ability levels of learners within their classes (Van der Horst and McDonald, 1997 : 133).

2.5.3 Developing materials and direction.

Verbal information is usually accompanied by texts, worksheets and study guides. Texts should both be interesting and at an appropriate reading level for the particular class of learners. Special direction about the aims, objectives, activities and expected learning outcomes of particular co-operative learning lessons should be given to learners in writing on a tag board displays for younger learners and as handouts for older learners. According

to Van der Horst and McDonald (1997 : 134), all the information to accomplish the particular outcomes should be addressed to the learners. The objectives and the anticipated learning outcomes of the lesson should be well elucidated for learners. What learners are expected to do while working in learning teams should also be addressed. Timelines for completion of particular work or activities, date of quizzes when using with STAD or jigsaw, assessment procedures for both individuals and group reward and format for presentation of reports should also be included.

2.5.4 Conducting the lesson.

According to Van der Horst and McDonald (1997 : 135) the role of an educator is to plan, manage and monitor the learning environment so that learners can effectively engage in learning. The following approach should be implemented: Forming the groups, reminding learners what they are to learn and their rewards for learning, reminding learners to work together and help one another, providing learners with resources if necessary. Circulating and providing assistance as required, to monitor activities and learning of learners and to make notes that will need to be dealt with once the group sessions are over. Assessing learning outcomes and helping them assess how well they collaborate with one another.

2.6 Key elements to consider about group work.

There are some key elements to consider about group work (Media in Education Trust, 1997 : session 3). These elements are:

- A group of between 4-6 learners work well as learners are able to sit together. This makes it easier for everyone to participate and communicate with each other. When there are too many learners in a group only few learners join in the discussion while others keep quite or loose interest;
- There are different ways of checking whether learners are working. Here are two suggestions. Firstly learners can make a contract that outlines the tasks to be done

by the group and what each individual is going to do. The educator can check whether this contract is adhered to. Secondly, for the report back on the group work, an educator can call the name of the group and the name of the learners. In this way the educator will be able to assess all learners and also ensure that each group is working;

- Some clear indicators that show learners is taking place include learners giving their view on tasks, asking question questions and they also suggests solutions to a problem;
- An educator needs to be careful when putting learners into groups. According to Media in Education Trust (1997: session 3) learner have to be separated in a way that a group consists of learner with various levels of abilities and different personalities. For example, one quiet learner, one noisy learner, one confident learner can help those who are having difficulty with their work. In this way one of the critical outcomes will be achieved namely to work effectively with others in a team, group organization and involvement.

2.7 The role of the teacher in an effective small group teaching.

deferent from whole class teaching. He takes on a supportive or a facilitating role in order to enable a group to function and learn independently from him. The following educator's behavior is related to a particular phase of a small group. It is the work of the educator to recapitulate from previous lesson, explaining task procedures and setting material to be used. (It is the responsibility of the educator for context, explicit teaching of content and recapitulating task content and procedures.) The educator has to monitor the group during Small group work and also to check progress. He should clarify or elicit task content solutions, clarify-task procedures and give answers to solution. The lesson must be summarized, findings are to be collated, review thinking process and look ahead (King, 1998: 240).

It is the duty of the educator to use normal patterns that will motivate the learners to work together in heterogeneous groups, and help one another to prepare learner material in readiness for competition against other groups. The normal pattern is for the educator to teach new content to the whole class. The group should study what has been taught and help one another. The groups have to be divided into competition teams where learners of similar achievement from each of the original groups come together to compete against one another. The learners represent the originating groups and earn a reward points for those groups based on achievements in the competition. The accumulated scores of reward points are then announced (King, 1998 : 234).

On the other side learners are grouped heterogeneously to undertake a group tasks by working together. To facilitate this approach, there are four essential components that should always be in evidence, namely: positive independence, learners' need to believe in order to achieve the group tasks, everyone's independence and each learner in different group has to work towards the achievement of an outcome. Accordingly each group member should have a specific role and members should know that they are working towards a group goal for which they are likely to receive a group reward. They have to notice the use of co-operative task structures and incentive structures in this approach. Each learner needs to be aware of his or her involvement and how he or she would be expected to contribute or to perform. Learners have to be instructed in appropriate interpersonal and small groups skills, meaning that they have to learn to work with one another (King, 1998 : 235).

2.8 Planning to use group work as a teaching strategy.

2.8.1 Long Term Plan.

The lesson in which you use small group work must be an integral of your long teaching plans. Choose the teaching strategy for each lesson carefully because working in groups will not be suitable in all lessons. You will probably find it useful to introduce learners gradually to this method of learning, through a series of short group activities so that they can develop their group learning skills in risk situations (Killen, 2000: 78).

2.8.2 Medium Term Plan

A week or so before the lesson is presented, the educators should be satisfied that learners have the necessary prior knowledge to participate productively in group activities. He also needs to check that all necessary equipment and materials will be available at the required time. He should decide on what basis he will form the group, direct the learner into groups because this gives him more exposure to interact with them. Some learners may be disappointed if they cannot choose the members of their groups. This should not be a problem particularly if one regularly changes the group so that some times friends get to work together. The educator should compromise to allow them to select one friend to be part of an exercise. He can combine the pairs of learners into group of four. If group are to efficiently function they need group leaders. The role of leaders should be rotated among group members. The learners must understand the leader's role and be prepared to accept direction provided by the leader. As part of the medium planning the educator might have to engage learners in short activities that will develop their skills as leaders (Killen, 2000: 78).

In most instances it will be necessary or at least desirable for each group to record the results of their discussion. Learner will be able to concentrate better on learning activities if they do not all have to worry about making notes. The simple solution to this problem is

to appoint one group member as the recorder for each group work session. To make it easier for the recorder and to enhance the quality of the information that is recorded the educator should provide some guidelines. Killen (2000 : 74) contents that a structured handout of information to be written can be a very useful tool. Once the small group activities have been completed, there should be some way for all the learners in each group to get copies of the recorded information. It may be worthwhile when giving each learner a copy of the information from the groups. Therefore the educator has to plan, prepare, record and distribute the outcomes of different groups.

2.8.3 Short Term Planning.

In the lesson prior to the group work you revise the work that will form the foundation for the group activities and check that the learners know what will be expected of them. The educator should remind learners of any reading they need to do and of equipment or materials they need to bring to the lesson. It is of great importance to establish groups, select the leaders and establish the rules for the lesson before group work takes place. Learners will know what is expected of them in the group work and will be able to get down to business quickly (Killen, 2000 : 80).

2.9 Implementing Group work as a Teaching Strategy.

At the beginning of the lesson the educator has to inform learners of the outcomes they are to achieve and remind them that they will be working in previously arranged groups. He has to remind them of the arrangements such as time allocation and workspace. It is very important for the learners to understand why they are working in groups. Under the educators the learners form into groups, collect any necessary materials and start working. The educator should not take too much time because they will start to lose interest and find other ways to amuse themselves.

The following procedures are applicable for the effective implementation of group work as a teaching strategy:

- The first job of the learners will be to elect group leaders. Alternatively, you may nominate them.
- The main task of the leaders is to get their groups working and to keep the members on task.
- The learners then get on with their discussion following any guidelines that the educator have given them.
- The educator must move around the groups to maintain an appropriate degree of order. He should attend to any difficulties that may arise, gain feedback on learner progress, help the groups to keep on tasks and encourage learners to find out more about the things they are learning. This is also an opportunity for an educator to get to know the individual learners better and reinforce the message that he is there as a resource to help them to learn. He must try to keep all the learners actively involved in learning. This means that the group task must be interesting and appropriately difficult and that provision must be made for the fact that groups will work at different rates.
- One of the educators' important functions is to monitor the group work and evaluate data about how learners are thinking and acting. He needs to identify those things that appear to help them to learn and those that appear to be creating barriers to learning.
- As the end of the lesson approaches, it is important for the educator to bring activities to a definite conclusion. This may involve putting away equipment or it may mean just bringing the groups together to summarize what learners have learned during the lesson. The educator should make a smooth transition from group activities such as progress reports, sharing experiences, checking learner performances, evaluating efforts and achievements and indicating future activities. It is important that the conclusion be dynamic (not boring), otherwise it will be of little interest or value to the learners (Killen, 2000 : 81-82).

2.10 What should be expected from the learners during group work?

According to Killen (2000 : 82), it is important that learners know what is expected of them and how the group will help them learn, so he must discuss these things before they start their group work. Regardless of the nature of the group work, have at least the following expectations from them:

- The learners should be prepared for group work in whatever way the educator have asked them to. This may entail some directed reading, gathering information from the community or finding out information from the internet.
- Each learner should take an active role in the group by contributing ideas, responding the input from other learners.
- Interactions among learners should be limited to things relevant to the group's task.
- Learners should co-operate with their respective group leaders.

2.11 Important factors to be followed when using group work.

The educator must control several factors that influence group dynamics so that the learners can work productively. Procedures to be followed as part of this control are:

2.11.1 Form group of the appropriate size.

Four or five learners seem to be an optimal number for small group discussion as long as the group members posses all the skills required for accomplishing the group task. Group work is more effective if the educator uses it frequently and he will safe a lot of time.

2.11.2 Determine an effective group composition.

The educators' basic choice is to let the learners form their own groups or tell them which groups he want them to work in. The advantage of letting learners form their own group is that they will probably want to work with their friends and therefore they should co-operate better with one another. If the educator decides to nominate the groups (learners of similar abilities, knowledge, ethnicity, etc) this may help the group to be cohesive and co-operative. However mixed groups can sometimes be more productive. Some researchers suggest that mixing groups on the basis of abilities and other characteristics is essential for productive work (Killen, 2000 : 85-86).

2.11.3 Foster group cohesiveness.

Cohesive groups are groups in which the learners feel they belong and willingly work together to achieve the group goals. The greater the cohesiveness of the group, the better the participation, communication and positive feelings of its members. Group cohesiveness will result in appropriate levels of interaction between the learners in the groups. Groups should be developed deliberately. Some useful suggestions on how to do this are to establish clear goals for each group and encourage learners to express their feelings (Killen, 2000 : 86).

2.11.4 Offer encouragement.

If the educator praises learners for their efforts and agree with some of the conclusion they are reaching, this will help them to view their co-operative efforts as worthwhile (Killen, 2000 : 86).

2.11.5 Mediate disputes and help learners to reach compromises.

It is inevitable that there will be disagreements between learners working in groups. Even though the educator may have spent time developing their communication skills and

stressing the importance of accepting all ideas and opinions, some conflicts will arise. He may have to intervene to help learners turn these conflicts into constructive learning experiences. Sometimes he might have to help learners to reach agreement by convincing one or more of them to modify their positions, or admit to an error (Killen, 2000 : 86-87).

2.11.6 Foster communication.

Learners will sometimes forget that listening is a very important part of group work. If they are to learn from one another, they must listen carefully and not be concerned just with offering their own group task. Time should be spent on listening and thinking. According to Killen (2000 : 87), if educators want learners to make any progress they have to listen to each idea and think about it. The group leader has to decide who is to speak.

2.11.7 Help the group leaders to be effective.

Appropriate group leadership is necessary if the groups are to achieve their goals in a co-operative and productive way. Help learners to develop leadership skills. The educator will need to establish clear guidelines for the group leader, make sure that everyone understands them, and monitor the groups to ensure that the leaders are able to fulfil their roles (Killen, 2000 : 87).

2.11.8 Keeping the groups on task.

The educator should help the group to define its position and refocus on the task. He may need to help the group to define its position and refocus on its goal. He should try to identify some disadvantages before he discusses how the prototype could be produced. Question as this can encourage the learners to find where they are and what to do next concerning the task : "Where do we need to go to from here?" (Killen, 2000 : 88).

2.11.9 Prompt learners to consider a new line to be taught.

If a group is short for ideas, or learners seem to be losing interest, the educator can present them with new ideas, suggestions or materials. For example, if learners were working in groups to develop or solve Johannesburg's traffic problems, he could suggest that they could imagine what would happen if taxis were not allowed to carry more than four passengers. By considering these extreme circumstances, the learners might be prompted to think of new ideas for solving the original problem. Keep prompting with the question: "What would happen?" (Killen, 2000 : 88).

2.11.10 Give learners information directly.

If a group seems to be floundering because they do not have critical information, the educator can save a lot of time and learner frustration by providing that information for them particularly if they are unaware that they are missing something vital (Killen, 2000 : 88).

2.11.11 Ask a learner to provide specific information.

Killen (2000 : 89) further states that as the educator monitors the activities of learners working in groups, he will often find that their learning would progress much faster if the group directs its attention to some crucial points. To help the group focus their discussion, he can ask one or more members to provide facts or examples or give their opinions about the issue or problems being discussed. It is important to keep the learners thinking and working towards a specific goal.

2.12 Organising the class.

2.12.1 Organising space, materials and equipment.

Educators must provide a physical environment (the arrangement of groups, the setting of groups members and arrangement of equipment) that is compatible with the desired outcomes of the lesson. The seating pattern and space must be such that the group members can see and hear one another easily. They should try to locate groups so that the educator can move from one group to another without disrupting the learners who are working and the groups do not disturb one another. This will obviously be a problem in overcrowded classroom. However, remember that in group work it is the interaction among learners that results in learning not the presentation of information. Perhaps the learner does need to be in a classroom. Before taking them outside to work in groups, the educator will have to explain why he is doing it and what he expects them to do (Killen, 2000 : 89).

2.12.2 Organising and monitoring the learners.

It is the responsibility of the educator to ensure that everything functions smoothly with learners focusing on learning without wasting time. To achieve this the educator has to provide learners with appropriate direction and monitor their activities. For activities to begin and end together without losing time, you need to give appropriate direction to the class. For example you might say "you have two minutes to finish the task, complete the summary of your conclusion and have it ready for presentation to the class" (Killen, 2000:90).

While the learners are working in groups, the educator should position himself so that he is aware of what each group is doing. When the educator is helping a particular group, he has to be aware of whatever is happening in the classroom. To avoid problems and to solve problems that arise he should move closer to the groups that his anticipates will experience or create problems. For example, if the educator is aware that one learner

often interferes with the learning of others, he should position himself near that learner once all groups have started the assigned task (Killen, 2000 : 90).

2.13 Supervising group work.

2.13.1 Tutor.

Although small group work is intended to be learner-centered there will be time when the educator has to instruct a learner, or a group by providing them with additional information by explaining things to them. The educator should simply answer their questions or help them if the group is not making adequate progress (Killen, 2000 : 90).

2.13.2 Discussion leader.

According to (Killen, 2000 : 91), sometimes the educator needs to intervene and temporarily take on the leadership of a group to ask questions or make comments and suggestions, to promote learning and critical thinking. He might need to take on this role if the designated group leader is temporarily unable to keep the group focused or productive.

2.13.3 Consultant.

Sometimes learners in the group will not be sure of validity of the conclusion they are reaching, possibly because of their lack of knowledge. The educator might need to act as a resource to provide information or to comment on their ideas. However the learners should be encouraged to solve their own problems and ask questions only when they really need to (Killen, 2000 : 91).

2.13.4 Counselor.

Killen (2000 : 91) further states that if the educator is concerned that the group is not functioning co-operatively, he may need learners to understand group dynamics and focus their attention on their assigned task.

2.14 Advantages of using group work as a teaching strategy.

Learners learning in small groups are found to benefit cognitively from the experiences. The learners learn content well and often better than through traditional approaches. Group tasks often focus on higher order thinking skills such as concept development, discovery learning and problem solving. The increased interaction on task and related matters normally result in enhancing learner's communication skills. The communication occurring may involve learners asking questions, explaining, making suggestions, criticising, listening, agreeing, disagreeing or making joint decisions (King, 1998 : 241).

There are some educational benefits associated with group work, for example, the pooling of learners expertise, the ethics of sharing creative ideas, the gaining of self knowledge and the development to interpersonal and group work skills through feedback and guidance. Using games, simulation or similar activities is more memorable because they are more engaging. Taking part in group work activities involves the mind, values and findings brought into plays. There are of course more obvious reasons for using groups, to develop the skills necessary in working with others in problem solving or planning, to develop self-confidence through expressing and defending ones own ideas. At the most practical levels it takes account of the fact that at work, people are members of task groups, project teams or meetings. Not only does this method reflect more realistically the work place environment, but learning in groups helps develop individuals to be able to live and work participatively and to sustain a society on those ideas (Foot et al, 1994 :18 and Reynolds, 1994 : 25).

2.15 Limitation of using group work as a teaching strategy.

Croll and Hastings (1996 : 45) have pointed out difficulties that face educators when dealing with group work. They have observed a high incidence of bullying, both physically and verbally that is intended to make working in groups unproductive. Most of the talk is to do with procedures where learners are generally intolerant of each other's views. Not all types of group interaction are beneficial. Giving an example or an explanation in response to a request for help is often unhelpful. The manner in which help is requested and given provides information about what is taking place in the group but it may not completely explain learners' behavior or lead to increased understanding of academic content and high achievement.

There are some reasons why group work is sometimes not effective. Classroom educators may not facilitate effective group work because learners are not given instructions or training to be co-operative or work in groups with mixed abilities, gender and personality. The authentic measures of academic outcomes may not be included and changing groups frequently minimizes any obvious effects of group interaction over time (Foot et al, 1994 : 423-424).

2.16 Making transitions from whole class teaching to learning teams

According to Van der Horst and McDonald (1997 : 135), the following steps are important for smooth transitions:

- Step 1:** Move quickly to the location where your team's name has been posted on the wall.
- Step 2:** Choose one team member to come up to the educator's desk to gather needed learning materials.
- Step 3:** Spend 10 minutes reading your particular assignment.
- Step 4:** At the educator's signal begin your discussion.

Step 5: At the educator's signal return to your learning team and start presenting your information.

Get several learners to paraphrase and repeat the direction to help everybody to pay attention and to provide the educator with feedback. Learners at any age, even adults, will not distribute themselves evenly around the room. It is better to identify a location for each team and have it clearly marked.

2.17 Managing or helping learners during teamwork.

The educator must remain constantly available to assist learners with resources identification. Too much interference and unasked assistance can be annoying to learners (Van der Horst and McDonald, 1997 : 135).

2.18 Three specific elements that are critical to the success of co-operative learning.

2.18.1 Face to face interaction.

Face to face interaction requires placing learners in close physical proximity to each other to complete assigned tasks (Van der Horst and McDonald, 2001:138).

2.18.2 A feeling of positive interdependence.

Establishing a feeling of positive interdependence means that learners believe that each individual can achieve the particular learning objectives. Only if all the learners in the group achieve the learning objective will the group be deemed to have been successful. In other words, unless we are successful none of us is truly successful (Van der Horst and McDonald, 2001 : 138).

2.18.3 Individual accountability.

It refers to the feeling on the part of each group member that each and every individual is responsible for completing the task individually and cannot allow other group members to do the work for him/her (Van der Horst and McDonald, 2001 : 139). Feelings of individual accountability can be established in a variety of ways including assigning individual marks, giving individual tests, work sheets and quizzes, or structuring tasks so that they are completed by the group while at the same time making it clear that the educator will call on individual group members at random to ensure that each learner has attained the learner outcomes that were to be attained by completing the task. Learner self -direction and independent learning must be valued in co-operative learning.

2.19 Key elements of successful cooperative learning.

2.19.1 Interdependence.

Teamwork, fostered by positive interdependence among the members, help learners to learn valuable interpersonal skills that will benefit them socially and vocationally. The essence of the cooperative group is the development and maintenance of positive interdependence among team members. Learners need access to activities in which they learn to depend on each other as they ask for and receive help from one another (<http://www.cde.ca.gov/iasa/cooplmg2.htm> : 5).

When learners work in cooperative teams in which 'all work for one' and 'one works for all' team members receive the emotional and academic support that helps them persevere against many obstacles they face in school ([http // www. cde ca.gov /iasa/cooplmg2.htm](http://www.cde.ca.gov/iasa/cooplmg2.htm) : 5-6). As cooperative norms are established, learners are positively linked to others in a class who will help them in completing shared tasks. When the environment becomes equitable, learners are better able to participate based on actual rather than perceived knowledge and abilities.

2.19.2 Interaction.

Cooperative learning creates natural, interactive contexts in which learners have authentic reasons for listening to another, asking questions, clarifying issues, and restating points of view. Cooperative groups increase opportunities for learners to produce and comprehend language and obtain modeling and feedback from peers. Much of the value of cooperative learning lies in the way that teamwork encourages learners to engage in a high level thinking skills as analyzing, explaining, synthesizing and elaborating (McGroarthy, 1993 : 19-46).

According to Johnson and Roger (1990 : 29-33), some learners do not instinctively know how to interact effectively with others. Interaction skills should be taught and reinforced. Teambuilding activities will help learners get to know and trust one another. Educators need to model positive interpersonal process to show how effectively they are performing the skills. Focusing on social skill development will increase learners achievement and enhance the learner's employability, interpersonal relationships, and general psychological health.

2.19.3 Achievement.

According to Kagan (1993 : 9-19) cooperative learning represents a valuable strategy for helping learners to attain high academic standards. The achievement of cooperative learning depends on the implementation of cooperative learning methods that are characterised by at least two essential elements, positive interdependence and individual accountability (Slavin, 1990 : 52- 54). There is even broader consensus about the effects of cooperative learning. For example, when learners of different racial or ethnic backgrounds work together toward a common goal, they gain a liking and respect for one another. Cooperative learning also improves social acceptance of mainstreamed learners with learning disabilities.

2.19.4 Professional development.

According to Holt (1993 : 183-187) to learn and to employ co-operative strategies, educators need access to extensive professional development that includes:

- The theory and philosophy of cooperative learning.
- Demonstration of cooperative methods.
- Ongoing coaching and collegial support at the classroom level.

2.20 Skills that function effectively when using cooperative learning as a teaching strategy.

According to Van der Horst and McDonald (1997 : 129) there are four sets of skills that learners need to develop overtime in order to function most effectively, namely:

2.20.1 Forming skills.

It is helpful in getting groups up and running smoothly and effectively. Those skills include:

- Moving into groups quietly without bothering others.
- Starting with the group rather than moving around the room.
- Using quiet voices that can be heard by members of the group and not others.
- Encouraging all group members to participate.

2.20.2 Functioning skills.

These are aimed at controlling the types of interactions that occur among group members. They include:

Staying focused on the task.

Expressing support and acceptance of others.

- Asking for help or clarification.
- Offering to explain or clarify.
- Paraphrasing or summarizing what others have said.

2.20.3 Formulating skills.

These are set of behaviors to help learners to do a better job of processing materials mentally, namely:

- Summarizing key points.
- Connecting ideas to each other.
- Finding ways to remember information more effectively.
- Checking explanations and ideas through articulation.

2.20.4 Fermenting skills.

They are needed to resolve cognitive conflicts that arises within the group, namely:

- Criticizing ideas without criticizing people.
- Synthesizing diverse ideas.
- Asking for justification.
- Extending other people's ideas.
- Probing for more information (Van der Horst and McDonald, 1997 : 129-130).

The educator should teach these social skills to learners just as they teach learning nt. While the learners are practicing the skills, the educator moves from group to group monitoring the skills of learners (Van der Horst and Mc Donald, 1997 : 130).

2.21 Approaches to cooperative learning (models).

The STAD, JIGSAW, and the Group of Investigation, are typical models that can be used with any subject, in almost any grade and without a special curriculum. Educators have to work out what suits their situation best. They may even create their individual approach to co-operative learning.

2.21.1 STAD.

The educator presents new academic content to learners each week, either through verbal presentation or text, for instance on worksheets. Learners within a given class are divided into four or five members or more with representative from each team. Team members use worksheets or study devices to master the content and then help each other to learn the content through tutoring, quizzing one another or carrying on discussions. Individually, learners may take weekly or biweekly quizzes on the content. These quizzes are assessed and each learner is given an "important mark". Each week through announcement on the notice board or some other device the teams with high marks and the learners who have high improvement marks or who have full marks on the quizzes are recognized (Van der Horst and McDonald, 1997 : 131).

2.21.2 JIGSAW.

In the Jigsaw model cooperative task structures with group goals are involved, task specialization and also cooperative incentives structures with individual rewards are also involved. In this model, in all studies, learners are divided into four members "Jigsaw" groups. Each member is assigned to become a subject matter expert with respect to one of the four areas and then given an opportunity to teach the material to other members of his/her Jigsaw team (<http://www.ouedu/ideas-groupact-html> :13).

Knowing that all groups in the class have the same information and topic, the learners across the group with the same information should meet as expert groups to develop more

fully their knowledge and understanding of that information. They would then return to their groups and teach others what they know. All learners are likely to participate since they know that their performance on follow up individual assessment task or test depends on the quality of sharing (King, 1998 : 236).

According to Van der Horst and McDonald (1997 : 131-132) Jigsaw learners are assigned to heterogeneous study groups of five or six members each. Learning content is presented to learners in text forms and each learner has the responsibility to learn a portion of the material. Members from different teams with the same topic (sometimes called the expert group) meet to study and to help each other learn the topic. Then learners return to their homes team meetings and discussions. Learners take quizzes individually over the content. In assessing learners, high scoring teams and individuals are recognized in the weekly newsletter or by some other means.

2.21.3 GROUP INVESTIGATION (GI).

Educators who use the GI approach divide their groups into heterogeneous groups of five or six members. In some instances groups may form around friendships or around interest in a particular topic. Learners select topics of study, pursue in-depth investigations of chosen sub-topic and then prepare and present reports to the whole class (Van der Horst and Mc Donald, 1997 : 39).

2.21.3.1 Steps to follow when using GI approach.

Step 1: Topic selection.

Learners are first exposed to a general field of inquiry. They then choose specific sub-topics within a general problem area, usually delineated by the educator. Thereafter learners organize themselves into small task-oriented groups of two to six members. Group composition is academically and ethnically heterogeneous (Van der Horst and Mc Donald, 2001 : 143).

Step 2: Co-operative planning.

Learners and the educator plan specific procedures, tasks and objectives consistent with the sub-topics of the problem selected in the previous step (Van der Horst and McDonald, 2001 : 143).

Step 3: Implementation.

Learners carry out the plan formulated in the steps described above. Learning should involve a wide variety of activities and skills and should lead to different kinds of sources both inside and outside the school. The educator closely follows the progress of each group and offers assistance when needed (Van der Horst and McDonald, 2001 : 143).

2.22 Using cooperative teaching as an example of learning experience

FORMAT- GROUP WORK LESSON (Department of Education, 1999: 44-45).		
Phase organizer: Environment		
Learning outcomes		
❖ Learners will be able to list and discuss ways of saving water, fill in tables, draw and ❖ Identify dams and locations of important cities on the map.		
Resources		
❖ Basic services of water, fill in the tables, pictures of rural and urban examples or water ❖ Resources. Map of South Africa-most important rivers and dams.		
Organization		
Learners work in groups of six.		
Group 1 Activities	Group 2 Activities	Group 3 Activities

Learners will list and discuss ways of saving water ❖ Closing of taps ❖ Rain water ❖ Washing ❖ Gardening	Fill in the tables and identify on map, the origin of water resources dams/boreholes streams/pits etc. Water features ❖ Windmills ❖ Dams	Learners will draw and identify dams and locations of important cities. ❖ Draw a labeled diagram to show hydrological cycle.
Homework Learners will visit the library resources and collect and organize information about water resources and ways of saving water.		
Assessment ❖ Observations ❖ Group work assessment ❖ Portfolio of assessment ❖ Peer assessment		

An example of the program organizer (topic) is quoted from the (Department of Education, 1999: 32-33).

2.23 Classroom Management.

Managing learners' behavior is the most difficult task that educators are experiencing. You will find that as learners are engaged in working independently, educators are experiencing problems such as:

- Not being able to gain attention.
- Not knowing answers to learners' questions.
- Learners calling out for help all the time.
- Learners not completing the work (King, 1998 : 256).

South African classrooms are complex and dynamic. The expectations that educators should teach problem solving and critical thinking and co-operative learning as a teaching strategy, demand more sophisticated classroom management. New methods of organization and management are required and these methods must not focus on the learner outcomes but also accommodate the expanding diversity of learners and settings. Each teaching strategy chosen by the educator to be used has its own social system and its own task demands influences the behavior of both educator and the learner (Van der Horst and McDonald, 1997 : 86).

Managing the classroom situation is based on the educator's managerial skills. According to King (1998 : 547) many writers such as Cole and Chan (1994) and Good and Prophy (1997) initiated general management skills such as:

- Caring for developing self- discipline is preferably to teacher controlling.
- Engaging learners in activities that they perceive to be meaningful and purposeful will lessen discipline difficulties.
- Allowing learners to help in rule setting so that better understanding and accepting the rules will prevail.
- Adopting positive approach to managing learners behavior rather than a negative approach.

2.24 Classroom Climate.

A positive classroom climate arises from careful planning and thought and many of the day-to-day actions of educators and learners, positive and negative, affect it. The way educators praise and criticise learners is involved, as is the extent to which learners perceive educators as being impartial, credible sources of information and facilitators and predictable trustworthy people. Although learning outcomes could be achieved in a very oppressive classroom climate, the creative atmosphere very essential to the creation of a positive learning environment is stifled. There is a positive socio-emotional climate in those classrooms where the educators and learners are happier and less stressed and a greater

desire for an educator to participate in learning on the part of learners prevail (Van der Horst and McDonald, 1997 : 95).

Myers and Myers (1990 : 94-95) suggest the use of four variables through which classroom climate can be looked at. The variables are as follows:

2.24.1 Ecology.

It refers to the physical aspects of the classroom, inclusive of classroom space as a whole, displays on the wall, chalkboards, and equipment present and learning resources.

2.24.2 Milieu.

It means that part of the classroom settings that stresses the feeling or the interpersonal atmosphere. When both educators and learners have a high degree of satisfaction with what happens in their classroom a positive climate develops. When they are unhappy, threatened or burned out the climate has a noticeably different feeling to it.

2.24.3 Social system.

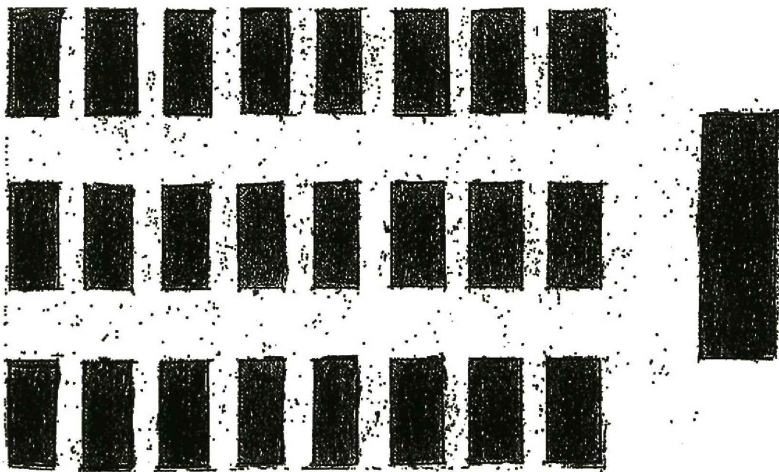
This relates to the educator-learner relationships. An important variable to this aspect of classroom environment is the way in which communication between the learner and the educator is developed. For example how an educator communicates information to learners and help them understand rules and policies and how extensively learners are involved in or consulted on policy rule formation.

2.24.4 Culture.

It refers to the values, beliefs and norms existing in the classroom and schools. Variables included under this heading are expectations, educator commitment, clarity of goals and educator use of praise, criticism and rewards.

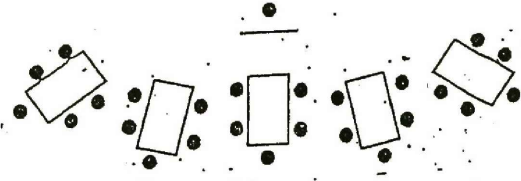
2.25 The following diagrams show the old classroom arrangement and the new classroom arrangement (Outcomes Based Education, All Phases and Grades 2000-2003 : 38-39).

The old arrangement:



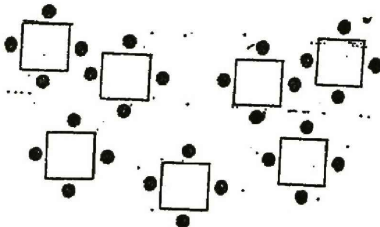
Learner's desks are arranged in straight lines and rows and the educator's desk is situated in the front.

**The new arrangement:
Seating Arrangement A**



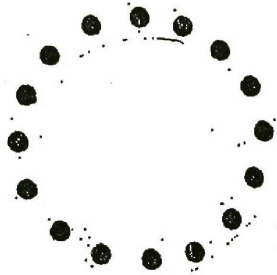
This is suitable for tasks that require both a common focus (e.g. on the educator, on a video, on an OHP) and some small group activity.

- Seating Arrangement B



This assumes that group work on a given task will be done at all time with some opening explanation from the educator (or even with any instruction printed or distributed to each table).

Seating Arrangement C



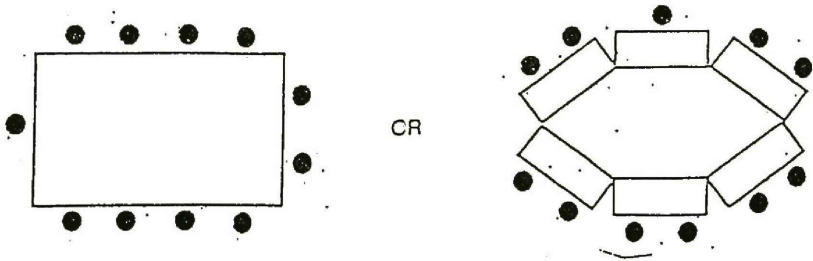
This is suitable for a discussion where no materials will be handled and where equal participation is expected (however, many people find the circle of chairs very threatening).

- Seating Arrangement D



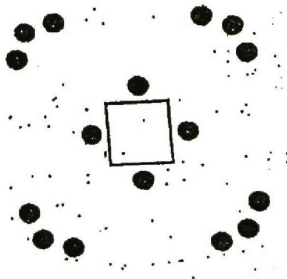
This is less task than seating C in that it allows face-to-face contact among all members of the group. If the educator is to chair the discussion, then he or she is best located at either end of the arc.

Seating Arrangement E



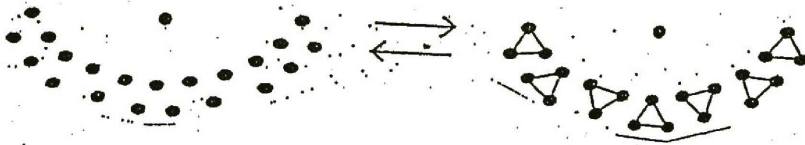
This is appropriate for a group discussion where there is a chairperson and where materials are likely to be used during the course of the session.

- Seating Arrangement F



This is appropriate for activities where some event is undertaken by a few people and observed by the majority as a basis of debriefing.

Seating Arrangement G



This is appropriate for a lecture which is somewhat informal and where there will be some "buzz group" activity (that is quick bursts of discussion among small groups of three people).

2.26 Effective usage of time.

It is the work of an educator to determine largely how learners use time. Whilst this may seem a challenging situation, research has shown that educators can control learners' effective use of time through the employment of a variety of teaching behaviors. The idealistic situation with respect to classroom use of time can be found when the factors of allocated time, learner's attention and meaningful success rate more or less overlap (King, 1998:594). When we consider the factor of meaningful success rate in relation to allocated time and learners attention the whole arena of learning tasks, which involves the educator's instructional skills and motivational strategies as much as the educator's managerial skills need to be examined. According to Brophy and Allen (1991: 90) learners must be facilitated to demonstrate outcomes as well as assisted to co-construct meaning and knowledge. Educators must be retrained specifically to maintain a balance between process and product approaches in order to curb useless time-consuming activities.

2.27 Managing classroom behavior.

Good behavior and discipline in school are essential to successful teaching and learning. Behavior in the classroom is directly affected by the educator's quality and classroom management skills. The three most common causes of misbehavior in the classroom are boredom, an inability to do the work an educator has set and effort demanded for a too long period without a break. Misbehavior can also be a means of seeking attention. These factors can be anticipated and avoided through careful lesson planning and considered classroom management. Low academic self-esteem sometime affects learner's behavior in the classroom (Capel, Leask and Turner, 1995 : 107-109).

Successful classrooms generally have organisation and management plans developed ahead of time by the educators, communicated to the learners at the beginning of the year and maintained consistently throughout the year. There are classroom in which efficient routines and procedures are clear and consistently followed in which educators and learners clearly understand expectations about the learners behavior and consequences about inappropriate behaviors and in which the rules and procedure are enforced and reinforced without any compromise (Myers and Myers, 1990 : 96).

Key to developing a general classroom management plan is the ability to anticipate problems before they arise. Whatever a teaching style the educator adopts in the classroom, the key to teach effectively is to establish his authority. According to Capel, Leask and Turner (1995 : 110) the educator's authority in the classroom is founded upon four main aspects which are:

- Conveying your status.
- Teaching competently.
- Effective classroom management.
- Effective dealing with learner's misbehavior

It is important to be vigilant in the class and constantly monitor the mood, attitude and behavior of any class you are teaching. Moving around the class and spending some few minutes in each part of the room to ensure that learners are very aware of your presence by moving quite close to them. If a learner is misbehaving as you are addressing the class, the educator moving towards them and standing by them is often enough to quieten them without the need to break the flow or even to mention their behavior. To gain control instead of reprimanding learners who are attentive the educator should ask the learners questions about the talk to gain their attention and to keep that of the other children. If they cannot answer it, ask another child to help them out and praise him for doing so (Montgomery, 1990 : 113).

According to Capel, Leask and Turner (1995 : 112-113) noticing misbehavior and responding calmly, effectively and good humor prevents misbehavior from escalating. Changing the pace of a lesson by providing a variety of tasks and activities does much to prevent boredom that is perhaps the major cause of misbehavior. If an educator becomes aware that a learner is experiencing difficulty with a task, he must be on hand to give academic help. If a learner continues to misbehave the educator must move her. The educator need to have articulated his/her intentions to do so to the whole class at the laying down of the ground rules and to have warned them that this action might be a consequence of their current behavior.

Warning miscreants clearly gives them an opportunity to avoid sanctions. The educator always do what he has promised to do without idle threats because learners will soon realize that you do not follow through with your threats and therefore take no notice of them. Not only do the threats loose their effect but also the educator loses his credibility which creates a downward spiral in which it becomes continually difficult to prevent misbehavior (Capel, Leak and Turner 1995 : 112-113).

2.28 Learning Resources.

Homelands and African education in general has suffered from neglect, lack of resources, overcrowded classes, under-qualified educators, inadequate buildings and classrooms. For any education to be well implemented, the resources that is physical, human and financial resources will remain the key factor. In the South African situation, equal distribution and allocation of resources has been a problem and still remains a recurring malaise in education even in the new democratic dispensation. Other schools are still not having basic resources like chalkboards, chairs and textbooks. A prime example is Bambanani High School in Thulamesha Location near Bush Buckridge area. Here fist cuffs and incessant conflict are the norm rather than the exception. It is reported that on average there are about three such incidents each day (Russel, 1998 : 11). If the current situation of under-resource schools is not addressed urgently using group work as a co-operative learning strategy will not contribute to effective teaching and learning.

According to the Department of Education (1999 : 1-61) learning resources can be anything that helps the process of learning. Resources can include ordinary objects like candles or things that we throw away such as bottles, packets and things we found outside like soil and rocks. There are also learning resources such as communication media and textual material, for instance, textbooks, newspapers, magazines and usage of television, radio and computers.

It is the programmed instruction that presents information to learners in a series of very carefully planned sequential steps. Audio aids include radios, record players and tape recorders. Radios for example, are a convenient means of getting up-to-the-minute news reports for analysis. Record players makes it possible to listen conveniently to plays, operas, concerts and speeches; while tape recorders makes it possible to record material or live performances of guest speakers, class debates for later use and analysis. Visual aids are pictures in the form of paintings, magazine clippings, photographs, and filmstrips. Visual aids help learners to convey abstraction powerfully without depending on verbal description. Their ability to focus attention on a characteristic situation or on a particular

step in a process, and their ability to allow learners to study a picture at length, to refer back to it conveniently and to make side by side comparison, are just some of the advantages they offer (Department of Education, 1999 : 9 – 10).

Textbooks are basic sources of information to guide educators about their syllabus. In the new curriculum implementation, old and new textbooks might be used differently. They provide the basics and background for particular ideas. They have activities that incorporate reading, writing, listening and speaking. More so they provide knowledge, guidance, information and evaluation procedures (Department of Education, 1999 : 10).

According to Clark and Starr (1991 : 415), materials for learning can be found almost everywhere. Building a file of pictures is easy and inexpensive and can be considerable fun. Learners together with the educator can start collecting pictures from periodicals and commercial sources such as museums and publishing houses both by purchase and rental. Many libraries have pictures to lend to educators.

Educators frequently need to make their own materials, particularly practice materials. Study guides, modern methods of duplication, written and typed material are easy to use and versatile with relatively little effort and ingenuity. You can duplicate exercises, diagrams, reading materials, assignments, study guides and other things. One advantage of building your own material is that you get what you want, not what some professor or merchandiser thinks you want (Clark and Starr, 1991 : 417).

Co-operative group work is system which enables educators to focus on the content of the task, and to be specifically prepared for the kinds of materials, questions, problems which emerged from that one task. According to Moon and Mayes (1994 : 167), when using co-operative group work educators are likely to be better prepared to cope with pupil demands. Learners want to question, discuss, argue and share; therefore it is the great strength of cooperative learning than channels this natural intelligence towards positive academic and social outcomes.

2.29 Conclusion.

Group work as a cooperative teaching and learning strategy can be used for the learners to achieve the desired outcomes. Proper planning, effective implementation and using of models or approaches to cooperative learning will lead to deeper understanding and higher achievement of learners. Educators need to demonstrate good facilitation skills and cooperative learning strategies to ensure successful implementation.

CHAPTER 3

3. RESEARCH METHODOLOGY.

3.1 Introduction.

Chapter three outlines the method of the study. It explains the rationale behind the methodology employed, how the research was conducted and steps taken to ensure the validity and reliability of the study. The aim of the study as stated in chapter one, is to determine views of educators in their effectiveness of using group work as a co – operative learning strategy.

3.2 Instrumentation Research.

3.2.1 Questionnaire as a research tool.

Baker (1998 : 166) defines a questionnaire as a set data collection instrument containing a selected group of questions because of their relevance and are carefully worded for clarity. It is a device which enables respondents to answer questions. It is also a type of data collecting instrument that is mostly used in surveys (Legotlo, 1996 : 28).

Tuckman (1994 : 216 – 217) also defines a questionnaire as a powerful instrument of survey research, whereby researchers use questions to collect data from a person, by providing access to what is inside a person's needs. It makes it possible to measure what a person thinks, and what experiences had taken places and what a person likes or dislikes. The information may be transferred into numbers and quantitative data by using the attitudes scaling.

3.2.1.1 Advantages of questionnaire method.

According to Bless and Higson – Smith (1995 : 111), the major advantage of the questionnaire methods is that a large coverage of the population can be achieved with little cost or time. Anonymity is also assured in filling – in questionnaires and helps the respondents to be honest in their answers.

Some researchers argue that the questionnaire survey is a useful way to obtain information about sensitive topics. According to Chardwick (1984 : 131) the anonymous can convince the respondent to fill the questionnaire without embarrassment or fear. Adams and Schanerveld (1985 : 207), argue that a questionnaire should create a feeling of importance on the part of respondents, a feeling that the research is relevant and the co-operation is vital. The researcher should avoid emotionally charged words and allow the respondents to report on what is really true about their situation.

3.2.1.2 Disadvantages of a questionnaire method.

According to Legotlo (1996 : 28), criticisms against the use of questionnaires are excessive non – response rate ; poorly constructed items; questionnaire deal with trivial information; and data from different questions are difficult to synthesize.

Legotlo (1996: 30) identifies the following disadvantage of questionnaire. Respondents may not respond to important points or emphasized aspects which are of importance to the investigator. A questionnaire may be misinterpreted as it is very difficult to formulate questions which convey almost the same meaning to all respondents.

3.2.2 Questionnaire construction.

3.2.2.1 The layout and content of the questions.

The questionnaire is divided into three sections.

Section A is based on the biographic questionnaire, to tap information such as the respondent's sex, age, qualifications and school location. The information is essential to understand the respondent's background.

Section B (1.6 –1.8), the objective of these questions is to evaluate educator's capability to implement a group work as a co-operative learning strategy. The section consists of 21 statements to be responded to on the likert scale ranging from one to five, 1 ("Agree") to 5 (Strongly Disagree).

Section C comprises of the unstructured questions with direct responses regarding the average number of learners in the classroom, the effectiveness of using group work as a teaching strategy and some difficulties encountered whilst using group work as a learning strategy.

3.2.2.2 Development of questionnaire items.

According to Leedy and Ormrod (2001 : 202-203), there are some guidelines for developing a questionnaire that encourages people to be co-operative and yield responses that you can and interpretes. The following should be borne in mind when a questionnaire is developed.

- Keep it short. The questionnaire should be as brief as possible and solicit only that information that is essential to research project.
- Use simple, clear unambiguous language. Terms that respondents may not understand must be avoided.
- Check for unwarranted assumption implicit in your questions. Very simple questions need to be considered.
- Provide clear instruction. Communicate exactly how people should respond. Clear explanation of likert scales or whatever devices should be applied.
- Make the questionnaire attractive and professional looking. Instrument must have clear lines with crystal clear typing.

3.2.3 Pilot Study.

The major purpose of the pilot-study is to detect the problems that must be solved before the major study (Legotlo 1996 :28–29). To determine any ambiguity and flaws, the questionnaire was pre – tested of sample (10) ten educators. The respondents were asked to comment on their points that might need to be considered and the instrument was rechecked to make sure that down the road, the real responses received will be of sufficient quality to help answer the research question.

3.3.4 Final Questionnaire.

The final questionnaire was administered to 208 grade 7, 8 and 9 educators in various schools in the Themba District.

3.2.5 Covering Letter.

The covering letter is a tool employed to introduce the questionnaires to the respondents. According to Cohen and Marion (1985 : 10), the purpose of the covering letter is to indicate the aim of the survey, to convey to the respondents its importance, to assure them about confidentiality and to encourage their participation.

The covering letter is the first page attached to the questionnaire (Appendix B). It explains the purpose of the study, accompanied by the questionnaire to the respondents. It gives the respondents the direction to complete the questionnaire and guarantees anonymity (Borg and Gall 1989 : 436).

3.3 Questionnaire Distribution.

All the questionnaires were self – administered and handed in at different schools. The researcher then requested the principals to help with the distribution of the questionnaires

to the selected educators. The arrangement for the collection of returned questionnaires was made with the principals.

On the 27 September 2003, questionnaires were handed to the respondents in different schools. They were allocated one month to fill-in the questionnaire. The table below indicates the distribution of the questionnaires.

Table 3.1 Distribution of the sample population

School Type	Number dispatched	Sample Population	Percent (%)
Rural	104	42	24%
Urban	104	12	76%
	208	168	100%

The questionnaires were sequentially numbered, and their numbers were recorded against the school which were recorded, to check the return of the completed questionnaire from various schools.

Out of 208 questionnaires sent out, 168 completed questionnaires were received. This constitutes 81% of returned questionnaires, which is sufficient to validate research findings.

3.4 Administrative Procedures.

Permission for access to schools was secured from circuit managers. The lists of middle and secondary schools in Themba District were obtained from the respective circuit officers. The researcher visited the schools and explained the objectives of the study and the nature of data to be collected from the educators.

3.5 Follow Up.

After a period of about a month had lapsed questionnaires were personally collected from different schools.

3.6 Population and Sampling.

According to Tuckman (1994 : 240 –245), the concept population refers to a group of individuals that have one or more characteristics in common, that are of interest to the researcher. It is also known as the target group about which the researcher was interested in gaining information and drawing conclusions. Out of 17 secondary schools a stratified sampling of 5 schools were selected, and out of 23 middle schools a stratified sampling of 7 schools were selected.

For this study, the target group was educators. The characteristics are common in that all these people have the knowledge regarding the implementation of group work as a co-operative learning strategy which is part of outcomes based education. Note that the said population represents all middle school and secondary schools in Themba District. The population was narrowly defined, and this facilitated the selection of a suitable sample.

3.7 Response Rate.

Permission was obtained to conduct the study at different rural and urban General Education and Training (GET) band schools, Themba Circuit, North – West Province. This group was selected as it is in the senior phase “that is grade 7,8 and 9” which composes of trained educators in the implementation of outcomes based education which comprises of cooperative learning strategy. A sample of 208 randomly selected educators in both rural and urban areas were included in this study. Due to inadequate completion of 40 questionnaires, 168 (81%) was included for statistical analysis.

3.8 Data Analysis.

Descriptive statistics like frequency distribution standard deviation and percentages were employed in the analysis of data. Furthermore, pie and bar graphs were also used in order to simplify the interpretation of data.

Data obtained in open – ended question has been gathered together into a number of groups to make it manageable.

3.9 Summary.

Questionnaires were used as major instruments to collect data in this study. Both the descriptive and inferential statistics, with the expert's assistance of statistical consultation were used to determine the educator's views.

CHAPTER FOUR

4. DATA ANALYSIS AND INTERPRETATION.

4.1 Introduction.

This chapter reports on the results of the empirical investigation conducted to determine the effectiveness of educators in implementing group work as a co-operative learning strategy in the learning environment, as well as the views of educators with regard to the understanding of its implementation. The qualitative and quantitative data collected through the investigation, is summarized and discussed in this chapter.

4.2 Section A: Biographical Data of Respondents.

Review of the subjects.

Out of the total target group of 208 educators, 168 (81.15%) responded. About 168 questionnaires were usable. Table 3.1 in chapter 3, shows clearly that the response rate in this study was satisfactory (168 out of 208 cases).

4.2.1 Gender

4.2.1.1 Gender respondents

Figure 4.1 : Pie Chart for Sex

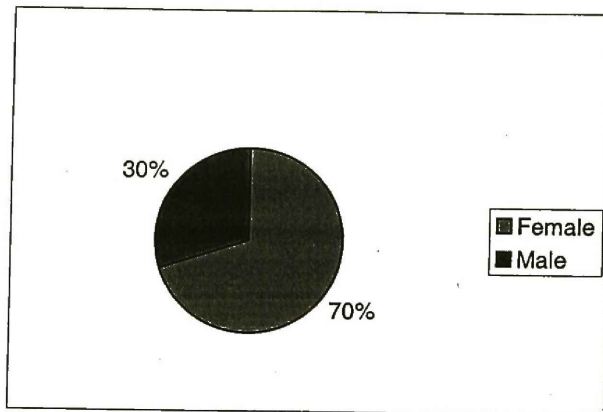
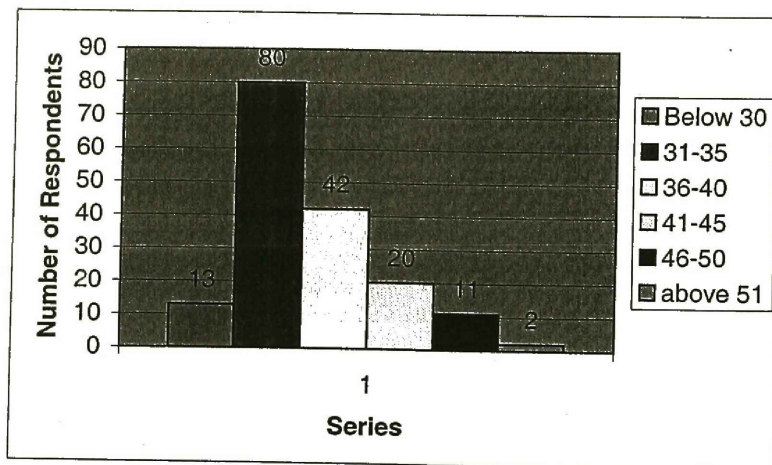


Figure 4.1 shows that 117 (70%) were female and 51 (30%) were male, as reflected in figure 4.1, which shows that most of the women are interested in implementing group work in the learning environment as compared to men. Gender was requested with the aim of determining the number of females and male participated in the study. Furthermore, information on gender was requested to determine differences with regard to their responses. These differences are analysed later in this chapter (cf. table 4.4)

4.2.1.2 Age of respondents.

Figure 4.2 Frequency Table for Age



Series 1 (below 30 years), series 2(31 – 35), series 3(36 –40), series 4(41 –45), Series 5(46 –50), series 6(51 and above).

The respondents reported their age by selecting one of the six age groups. Figure 4.2 above indicates that the majority of respondents, that is 80 (42.62%), are between ages of 31-35. This depicts that the majority of educators with an interest in this learning strategy are relatively young. They still have enough chance for implementing this strategy effectively through the help of in-service training. It could also be deduced that 42 respondents were between the ages 36 and 40 years old (25%). Only 11(6.55%) of the respondents were above the age of 46. Most of the respondents are far from the retiring age of 65. They still have the chance of developing themselves through in-service training or by furthering their studies privately.

4.2.1.3 Academic qualification.

Table 4. 1: Respondents Academic Qualification

VALUE	df	%	Cum. %
1 Below Std 10	2	1.23	1.23
2 Std 10	67	41.10	42.33
3 A degree (B.A)	49	30.06	72.39
4 Honours (B.ED)	34	20.86	93.25
5 Masters degree	5	3.07	96.32
6 Doctorate	6	3.68	100.00

Table 4.1 depicts the distribution of academic qualifications. About 67 (41.10%) of the respondents do not have degrees. A great deal has to be made for educators to acquire knowledge and skills needed, especially in the implementation of group work as a co-operative learning strategy.

4.2.1.3 Professional qualification.

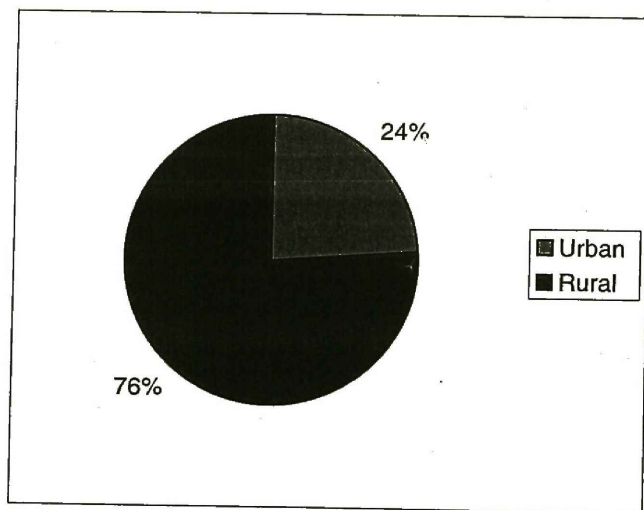
Table 4.2: Respondents Professional Qualifications

Value	df	%	Cum. %
1 L.P.T.C.	1	0.74	0.74
2 H.P.T.C./P.T.C.	22	16.30	17.04
3 J.S.T.C.	5	3.70	20.74
4 S.T.D.	13	9.63	30.37
5 H.E.D.	16	11.65	42.22

Respondents were further requested to indicate their professional qualifications. Table 4.2 indicates that most of the educators are professionally qualified. The implication is that the in-service training need is great for the teaching strategy to be effective and satisfy. Educators development programs are needed to develop educators towards new skills and techniques in group work as an effective learning strategy.

4.2.1.4 School Location.

Figure 4.3 : Location of Schools.



Respondents were asked to indicate whether their schools were located in urban or rural area. Figure 4.3 shows that 126 (76%) of the respondents teach in rural schools and only 42 (24%) in urban schools. This was included in the questionnaire to determine differences in responses between educators in rural schools and educators in urban schools (cf. table 4.5).

The implication here is that, whether the implementation of group work as a teaching strategy is effective in rural or urban schools. The interpretation of both rural and urban respondents shows that group work as a co-operatively learning strategy is implemented both in rural and urban schools.

4.3 SECTION B: Issues and challenges facing educators and their implementing group work as a co-operative learning strategy and their ability to use group work as a teaching strategy.

The objectives of this section was to find out whether the respondents do have the ability to use group work as a teaching strategy and to indicate some challenges regarding the implementation of this strategy. The other objective was to find out respondents' issues regarding the effectiveness of using group work as a teaching strategy.

4.3.1.6 Ability to use group work as a teaching strategy (Item 1-10).

Table 4.3

VARIABLES	N	Mean	Std Dev
1.Able to divide learners in appropriate sizes.	168	1.67	0.93
2.Able to provide learners with necessary contents and procedures.	168	1.59	0.90
3.Learners in different groups are provided with necessary material needed to complete their task.	168	2.10	1.33
4.Able to allocate appropriate time for the groups to finish their tasks.	168	2.24	1.29
5.All learning groups are provided with appropriate direction to accomplish their task.	168	1.69	1.00
6.All learners are able to focus on their tasks	168	2.49	1.41
7.Learning activities and learning by learners are monitored.	168	1.57	0.75
8.Learners are spending their times listening and inking.	168	2.70	1.37
9.All learners are well assessed.	168	2.07	1.23
10. All learners are rewarded after each and every learning session.	168	2.45	1.37

According to Welman and Kruger (2001:208 – 209), Standard Deviation shows how closely values clustered around the mean. Approximately 68% of the respondents lie between one below and one Standard Deviation above the mean. The table proves that educators are able to use group work as a co-operative teaching strategy.

4.3.1.6.1 Difference in response between male and female.

Table 4.4

VARIABLE: Item 1.6.1 – 1.6.10	MALE		FEMALE		MEAN DIFF	T	Sig. 2- tailed
	X1	SD	X2	SD			
1. Able to divide learners in appropriate sizes	1.585	0.840	1.880	1.100	0.295	1.70	0.093
2. Able to provide learners with necessary contents and procedures.	1.644	0.938	1.460	0.813	0.184	1.21	0.229
3. Learners in different groups are provided with necessary material needed to complete their task.	2.102	1.355	2.100	1.282	0.002	0.01	0.994
4. Able to allocate appropriate time for the groups to finish their task.	2.110	1.306	2.540	1.216	0.430	1.99	0.048
5. All learning groups are provided with appropriate direction to accomplish their task.	1.669	1.013	1.740	0.965	0.071	0.42	0.676
6. All learners are able to focus on their task.	2.271	1.400	3.000	1.325	0.729	3.13	0.002
7. Learning activities and learning by learners are monitored.	1.517	0.748	1.700	0.763	0.183	1.44	0.151
8. Learners are spending their time listening and thinking.	2.627	1.351	2.860	1.429	0.233	1.00	0.317
9. All learners are well assessed.	2.008	1.237	2.220	1.200	0.212	1.02	0.308
10. Learners are rewarded after each and every learning session.	2.542	1.400	2.240	1.271	0.302	1.31	0.190

1. Here the p value is 0.093, which is larger than 0.05. This suggests that there is no difference between the means of the two groups. The two groups are not significantly different in terms of their mean scores on Item 1 (t = 170, df = 74, .093).

Item 2. Here the p value is 0.229, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not statistically significantly different in terms of their mean scores on Item 2 ($t = 1.21$, $df = 166$, $p = 0.229$).

Item 3. Here the p value is 0.994, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not statistically significantly different in terms of their mean scores on Item 3 ($t = 0.01$, $df = 166$, $p = 0.994$).

Item 4. The p value is 0.048, which is smaller or equal to 0.005. This suggests that there is 95% or better probability that this statistically significant difference between the means of the two groups. The two groups are statistically significantly different at the 5% level in terms of their mean scores on ($t = 1.99$, $df = 166$, $p = 0.048$). There is a difference of 0.430 between the two Items.

Item 5. Here the p value is 0.676, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not statistically significantly different in terms of their mean scores on Item 5 ($t = 0.042$, $df = 166$, $p = 0.676$).

Item 6. The p value is 0.002, which is smaller or equal to 0.005. This suggest that there is 95% or better probability that there is statistically significant difference between the means of the two groups. The two groups are statistically significantly different at the 5% level in terms of their mean scores on ($t = 3.13$, $df = 166$, $p = 0.002$). There is a difference of 0.729 between the two means.

Item 7. Here the p value is 0.15, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not cally significantly different in terms of their mean scores on Item 7 ($t = 1.44$, $df = 166$, $p = 0.151$).

Item 8. Here the p value is 0.317, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not statistically significantly different in terms of their mean scores on Item 8 ($t = 100$, $df = 166$, $p = 0.317$).

Item 9. Here the p value is 0.308, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not statistically significantly different in terms of their mean scores on Item 9 ($t = 1.02$, $df = 166$, $p = 0.308$).

Item10. Here the p value is 0.190, which is larger than 0.05. This suggests that there is no statistically difference between the means of the two groups. The two groups are not statistically significantly different in terms of their mean scores on Item 10 ($t = 1.31$, $df = 166$, $p = 0.190$).

Almost in all the items the p- value is > 0.05 . This means that there is no significant difference between male and female educators in implementing group work as a teaching strategy. Only in item 4 and 6 is the p- value < 0.05 . This means that there is a significant difference between male and female educators in implementing group work as a teaching strategy.

4.3.1.6.2 Differences in response between rural and urban schools.

Table 4.5

VARIABLE: Item 1 – 10	Rural		Urban		MEAN DIFF	t	Sig . 2-tailed
	X1	SD	X2	SD			
1. Able to divide learners in appropriate sizes	1.661	0.936	1.707	0.929	0.046	0.127	0.785
2. Able to provide learners with necessary contents and procedures.	1.551	0.842	1.707	1.078	0.156	0.85	0.400
3. Learners in different groups are provided with necessary material needed to complete their task.	2.228	1.346	1.707	1.209	0.521	2.21	0.029
4. Able to allocate appropriate time for the groups to finish their task.	2.213	1.301	2.317	1.274	0.104	0.45	0.654
5. All learning groups are provided with appropriate direction to accomplish their task.	1.724	1.021	1.585	0.921	0.139	0.78	0.439
6..All learners are able to focus on their task.	2.520	1.425	2.390	1.394	0.129	0.51	0.612
7. Learning activities and learning by learners are monitored.	1.583	0.781	1.537	0.674	0.046	0.34	0.734
8. Learners are spending their time listening and thinking.	2.764	1.388	2.488	1.325	0.276	1.12	0.265
9. All learners are well assessed.	2.016	1.188	2.244	1.338	0.228	1.04	0.302
10. All learners after each and every learning session are rewarded.	2.535	1.367	2.195	1.346	0.340	1.39	0.166

Item 1. Here the P value is 0.785, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 1 ($t = 0.27$, $df = 166$, $p = 0.785$).

Item 2. Here the P value is 0.400, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 2 ($t = 0.85$, $df = 166$, $p = 0.400$).

Item 3. The p value is 0.029, which is smaller or equal to 0.005. This suggests that there is 95% or better probability that this statistically significant difference between the means of the two groups. The two groups are statistically significantly different at the 5% level in terms of their mean scores on ($t = 2.21, df = 166, p = 0.029$). There is a difference of 0.430 between the two items

Item 4. Here the P value is 0.654, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 4 ($t = 0.45, df = 166, p = 0.654$).

Item 5. Here the P value is 0.439, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 5 ($t = 0.78, df = 166, p = 0.612$).

Item 6. Here the P value is 0.612, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 6 ($t = 0.51, df = 166, p = 0.612$).

Item 7. Here the P value is 0.735, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 7 ($t = 0.34, df = 166, p = 0.735$).

Item 8. Here the P value is 0.265, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 8 ($t = 1.12, df = 166, p = 0.265$).

Item 9. Here the P value is 0.302, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 9 ($t = 1.04$ $df = 166$, $p = 0.302$)

Item 10. Here the P value is 0.166, which is larger than 0.05. This suggests that there is no statistically significant difference between the means of the two groups. The two groups are not statistically significantly different because of their mean score on Item 10 ($t = 1.39$, $df = 166$, $p = 0.166$).

In Table 4.5 the urban respondents means are higher than the rural respondents'. This illustrates the importance of schools that are exposed to modernized resources such as enough classrooms and teaching aids, which enables educators to implement group work effectively.

4.3.1.7 Some challenges regarding the implementation of group work as a teaching strategy (Table 4.6 – 4.11).

Frequency tabulation is used. It is a listing of value labels or scores and the frequencies with which they occur. The value labels are listed in the "value" column and the number of cases obtaining each value label in the "F" column. The percentage "%" column shows the number of cases in percentages. The "Cum %" (Cumulative Percentages) column shows that percentage of cases obtained a value equal to or less than the value.

Table 4.6: I am able to monitor whether all groups are co-operatively working together.

<i>Value</i>	<i>F</i>	<i>%</i>	<i>Cum. %</i>
1 Agree	89	52.98	52.98
2 Strongly Agree	35	20.83	73.81
3 Do not know	12	7.14	80.95
4 Disagree	28	16.37	97.62
5 Strongly Disagree	4	2.38	100.00
TOTAL	168	100.00	

Missing or invalid cases: 0

Over half of the respondents 89 (52.98%) agree with the above-mentioned statement, that they are able to monitor whether all groups are cooperatively working together. This therefore indicates that, it is the view of educators that they are able to monitor learners in different groups, to move into groups quietly, without bothering others.

Table 4.7: Different groups function and learn independently.

<i>Value</i>	<i>F</i>	<i>%</i>	<i>Cum. %</i>
1 Agree	69	41.07	41.07
2 Strongly Agree	53	31.55	72.62
3 Do not know	17	10.12	82.74
4 Disagree	0	00.00	82.74
5 Strongly Disagree	29	17.26	100.00
TOTAL	168	100.00	

Missing or invalid cases: 0

A significant number of respondents 69 (41,7%) agree that different groups function and learn independently. The findings indicates that at least some educators tend to have the skills towards the implementation of group work as a learning strategy. It is of

importance for the educator to use different approaches when using group work for each and every group to finish their activities and reach conclusion.

Table 4.8: There is sufficient time for each group to finish its activity and reach conclusion.

Value	F	%	Cum. %
1 Agree	45	26.79	26.79
2 Strongly Agree	31	18.45	45.24
3 Do not know	22	13.10	58.33
4 Disagree	59	35.12	93.45
5 Strongly Disagree	11	6.55	100
TOTAL	168	100.00	

Missing or invalid cases: 0

The majority of the respondents 59 (35,12%) disagree with the statement that there is sufficient time for each group to finish its activity on time. The possible explanation to this finding could be ascribed to the fact that, there must be time lines for completion of particular activities which is clearly supported by the objectives and the anticipated learning outcomes (cf. 2.25).

Table 4.9: I am able to intervene in learners' conflicts during group work session.

Value	F	%	Cum.%
1 Agree	95	56.55	56.55
2 Strongly Agree	48	28.57	85.12
3 Do not know	14	8.33	93.45
4 Disagree	11	6.55	100.00
5 Strongly Disagree	0	00.00	100.00
TOTAL	168	100.00	

Missing or invalid cases

Most of the respondents 95 (56.55%) agree with the statements that they are able to intervene conflicts during group work session. The possible explanation to this finding could be ascribed to the fact that, conflicts must not be ignored, as it is inevitable that there will be some disagreement between learners working together in one group. It is the work of the educator to intervene to help learners to reach the agreement by convincing one or more of them to admit to an error.

Table 4.10: Each group member is able to complete his or her task.

Value	F	%	Cum. %
1 Agree	62	39.90	36.90
2 Strongly Agree	27	16.07	52.98
3 Do not know	25	14.07	67.86
4 Disagree	49	29.17	97.02
5 Strongly Disagree	5	2.98	100.00
TOTAL	168	100.00	

Missing or invalid cases: 0

The results of this study depicted that 62 (39.90%) of the respondents agree with the statement that each group member is able to complete his or her own task. The possible explanation for the results could be ascribed to the fact that each group member must be

responsible of completing his or her own task and not allowing other group members to do the work for him or her. For an individual learner to be accountable in completing his own task, an educator should assign individual marks, and giving individual test. He should make sure that he assess learners' work and give them feedback on time.

Table 4.11: Each learner is able to achieve the outcomes that were to be attained by completing the task.

<i>Value</i>	<i>F</i>	<i>%</i>	<i>Cum %</i>
1 Agree	52	30.95	30.95
2 Strongly Agree	19	11.31	42.26
3 Do not know	34	20.24	62.50
4 Disagree	56	33.33	95.83
5 Strongly Disagree	7	4.17	100.00
Total	168	100	

Missing or invalid cases: 0

About 56 (33.33%) of the respondents disagree and 34 (20.24%) do not know that each learner is able to achieve the outcomes that were to be attained by completing the task. If educators are well trained, they will be able to break learners' task into a series of sub-steps. The tasks will be then completed in assembly line fashion, with each group member completing only one section of the total task.

4.3.1.7 Issues regarding the effectiveness of using group work as a teaching strategy (table 4.12 – 4.16).

frequency tabulation is used. It is a listing of value labels or scores and the frequencies with which they occur. The value labels are listed in the "value" column and the number of cases obtaining each value label in the "F" column. The percentage "%" column shows the number of cases in percentages. The "Cum %" (Cumulative Percentages) column shows the percentage of cases obtained a value equal to or less than the value.

Table 4.12 : Learners learn content well and often better.

<i>Value</i>	<i>F</i>	<i>%</i>	<i>Cum %</i>
1 Agree	79	47.02	42.02
2 Strongly Agree	56	33.33	80.36
3 Do not know	11	6.55	62.50
4 Disagree	21	12.50	95.83
5 Strongly Disagree	1	0.60	100.00
Total	168	100	

Missing or invalid cases: 0

Findings indicated that most of the respondents 79 (47.2%) agreed with the statement that when using group work as a teaching strategy, learners learn content well and often better. Generally, the impression presented by the respondents, shows that thorough training is needed where by all models to be implemented effectively for all learners to learn content well and often better (cf. 20.20).

Table 4.13 : Group work enhances the understanding of concepts.

<i>Value</i>	<i>F</i>	<i>%</i>	<i>Cum %</i>
1 Agree	79	47.02	47.02
2 Strongly Agree	71	42.26	89.29
3 Do not know	12	7.14	96.43
Disagree	6	3.57	100
Strongly Disagree	00.00	0.00	00.00
	168	100	

Missing or invalid cases: 0

of the respondents agree 79 (47.2%) and strongly agree 71 (42.26%) with the statement that group work enhances the understanding of concepts. This findings indicates that most of the educators have lack of materials for learners to understand

concepts well verbal information should be accompanied by interesting text, worksheets and study guides (cf. 2.3.2).

Table 4.14: Learners communication skills improve (e.g. ask questions, explaining and making suggestions).

Value	F	%	Cum %
1 Agree	75	44.64	44.64
2 Strongly Agree	81	48.21	92.68
3 Do not know	4	2.38	95.24
4 Disagree	6	3.57	98.81
5 Strongly Disagree	2	1.19	100
Total	168	100	

Missing or invalid cases:

The findings indicated that the large number of respondents 65 (44.64%) and 81 (48,21%) agree and strongly agree with the statement that learners communication improves when using group work as a teaching strategy. With reference to the improvement of learners communication skills, most of the respondents agree that group work as a cooperative learning strategy plays a major role. The findings are supported by Van der Horst and McDonald (cf.2.17), with regard to the three specific elements that are critical to the support of co-operative learning.

Table 4.15: Groups work helps individual learner to be accountable.

Value	F	%	Cum %
1 Agree	79	47.02	47.02
2 Strongly Agree	58	34.52	81.55
3 Do not know	9	5.36	86.90
4 Disagree	17	10.12	97.02
5 Strongly Disagree	5	2.98	100.00
	168	100	

Missing or invalid cases over half of the respondents 58 (34.52%) strongly agree and agree 79 (47.2%) with the statement that group work helps individual learner to be accountable. Positive indication approves that group work as a co-operative learning strategy helps individual learner to be accountable. (From the literature consulted (cf. 2.2) that group work is one of the teaching strategies that improves academic achievement, behaviour and attendance; increase self-confidence and motivation amongst learners). It is also credited with increasing the liking of school and cooperation amongst classmates.

Table 4.16 Group work helps weaker learners to improve their learning.

Value	F	%	Cum %
1 Agree	64	38.10	38.10
2 Strongly Agree	68	40.48	78.57
3 Do not know	20	11.90	90.48
4 Disagree	13	7.74	98.21
5 Strongly Disagree	3	1.79	100.00
Total	168	100	

Missing or invalid cases: 0

The majority 68 (40.48%) of the respondents strongly agree and 64 (38.10%) agree with the statement that group work helps weaker learners to improve their learning. Supporting the respondents views (cf. 2.2), in this type of teaching strategy, learners care about each other, and learn to appreciate each other regardless of ethnicity and performance disability.

Table 10 to 14 give us the clear indication that group work as a teaching and learning strategy plays an important role in the learning of learners. According to Kings, (1998:241), learners learning in small groups are found to benefit cognitively from the experiences. Group tasks often focus on high order thinking skills such as concept development, discovery learning and problem solving. The increased interactions that occur among learners, especially interaction on task and related matters normally result in enhancing learners' communication skills. The communication occurring may involve learners asking questions, explaining, making suggestions, criticizing, listening, agreeing, disagreeing and joint decisions.

SECTION C: Results and Discussion of open-ended questions.

The objectives of this section was to find out how the respondents knew about the effective implementation of group work as a teaching strategy. The respondents were also to give their difficulties and to indicate whether they do have knowledge about group work and its implementation.

4.4.1.9 Average number of learners in the classroom.

TABLE 4.17

Value	F	%	Cum%
1. 20-35	55	32.74	32.74
2. 36-45	48	28.57	61.31
3. 46-55	22	13.10	74.40
4. 56-65	30	17.86	92.26
5. 66 upwards	13	7.74	100
TOTAL	168	100	

In table 4.17 at least 17.86 and 7.74% of educators reveal that their classes are over crowded. The interpretation of negative response could be based on the fact that, if classes consist of small group of learners, this will enable the educator to monitor each group and to assess the learners work effectively.

4.4.1.10 Importance of using group work as a teaching strategy.

4.4.1.10.1 Some respondents felt that it is essential to use group work as a teaching strategy. The following were mentioned:

- **Active participation of learners.**

To this effect 120 (71.43%) educators are in agreement that group work when effectively used, will produce the desired outcome.

- **Learner's performance improve.**

The majority of the respondents 121 (72.2%) agreed that using group work as a teaching strategy improves learning. Only 13 (8.33%) of the educators responded that they are unable to monitor learners and that there is also lack of resources to implement group work effectively.

4.4.1.10.2 The following respondents give reasons why is it not essential to implement group work as a teaching strategy.

- **Time consuming.**

The majority 129 (76.79%) of respondents mentioned the time-consuming nature of tasks as one of the issues that negatively affects the implementation of group work.

- **Lack of participation of learners.**

The respondents 96 (57.14%) mentioned the challenge of lack of or insufficient participation amongst learners in different groups as a reason for not implementing it.

- Lack of resources.

The respondents 117 (69.64%) revealed that a lack of resources is a major challenge that disturbs the effectiveness of group work as a teaching strategy.

4.4.1.11 Indicate in order of preference some difficulties you encounter when using group work as a co-operative learning strategy.

Respondents indicated the following, as difficulties they are encountering when using group work as a co-operative learning strategy:

- Time consuming
- Lack of participation amongst learners in some groups
- Unable to monitor learners work
- Lack of resources
- Uncontrollable learners behaviour

4.4.1.12 Do you regard yourself as a person who is well knowledgeable about group work and its implementation?

The respondents were asked to tick the correct answers as whether they agree or disagree if they are well knowledgeable about group work and its implementation. Out of 168 of the respondents 92 (54.76%) agree and 76 (45.23%) disagree of their knowledge about group work and its implementation.

4.5 Summary.

In this chapter the findings of the empirical investigations that were conducted to evaluate the effectiveness of educators in implementing group work as a co-operative learning strategy in middle and secondary schools were analysed, tabled and discussed.

The investigation revealed that to a very large extent educators in their schools studied have positive attitudes in implementing group work as a co-operative learning strategy. What also emerged is that teachers have some difficulties in implementing the strategy effectively because of lack of knowledge. The researcher strongly believes that if educators implement group work as a co-operative learning strategy effectively, it will improve learner's performance.

CHAPTER FIVE

5. SUMMARY, FINDINGS, RECOMMENDATIONS AND CONCLUSION.

5.1 Introduction.

This chapter provides a brief summary of the study. It reflects the major findings of the study as well as recommendations concerning issues and challenges in implementing group work as one of the co-operative learning strategies in Curriculum 2005.

5.2 Summary.

In chapter 1 the summary of the study and a statement of the problem was outlined. The main concern of this study is the educator's role in the learning environment, which must be more learner-centered to ensure maximum learner involvement in a creative manner. Hence, group-work as a co-operative learning strategy, is one of the strategies that the researcher focused on due to the paramount role it plays in the learner-centered approach.

Chapter 2 outlined the implementation of group-work as a co-operative learning strategy in the learning environment from literature and discussed the following aspects fully:

- Effectiveness of using group-work as a teaching strategy;
- Implementation of group-work as a teaching strategy;
- Teaching skills needed when using group-work;
- Organizing the class;
- Advantages and limitation of using group-work;
- Group-work as a co-operative learning strategy;
- Managing the class-room and class-room climate;
- Effective usage of time;
- Managing the class-room behaviour; and
- Learning resources.

Chapter 3 gives the details of the empirical investigation conducted to determine the effectiveness of group work as a co-operative learning strategy. Details regarding the use of questionnaires as a research instrument are given. Both the advantages and the disadvantages of the questionnaire are stated.

Aspect such as development of questionnaire; questionnaire format; pre-testing of questionnaire, data collection, population and sampling; response rate, handling of missing data and statistical techniques are also to be found in chapter three.

In Chapter 4 an empirical investigation was conducted to determine what views educators have regarding the effectiveness of using group-work as a co-operative learning strategy.

The study confirmed the paramount importance and effectiveness of implementing group work as a co-operative teaching strategy. In this regard, the educators' role is important. Amongst others they have to know the strategy of dividing learners into groups of appropriate sizes, monitor learners, and act as a facilitator in ensuring learners work cooperatively and complete their task on time. The study revealed that implementing group work skillfully result in good achievement of learners in their schoolwork.

5.3 Research Findings.

Some important findings of the study on the effective implementation of group work as a cooperative learning strategy were made.

5.3.1 Findings on Aim One.

With regard to aim one namely, to determine through literature the nature of group work as co-operative learning strategy (cf.1.4.2.) the following findings were made:

5.3.1.1 The role of an educator.

For the effective teaching that is different from whole class teaching to occur, the educator must take on a supportive or a facilitating role in order to enable a group to function and learn independent of him. It is the work of the educator to explain task procedures and materials. Setting the context and recapitulating on task content and procedures are just some of the tasks he/she will have to discharge in this regard. Facilitating in order to enable a group to function and learn independently of him must be expected.

The importance of actively monitoring groups during small group work and also checking progress will also take front seat. He must also be prepared to explain or clarify task content, task procedures and give answers and solutions. The lesson must be summarized, findings to be collated, review thinking processes and look ahead.

5.3.1.2 Learning environment resources and models.

Learners have to be divided into competitive groups where learners of similar achievement from each of the original groups come together to compete against one another. The learners represent the originating groups based on achievement in the competition. The accumulated scores of reward points are publicly announced. The setting patterns and space must be such that the group members can see and hear one another easily. You should try to locate the groups so that you as the teacher can circulate easily without interrupting the learners who are working so that groups do not disturb one another.

The arrangement of groups, the seating of group members, and the arrangement of equipment and learning resources should be compatible with desired outcomes of the

n. Forming, functioning, formulating and fermenting skills (cf. 2.17.1), (cf. 2.17.2) (cf.2.17.3) and (cf.2.17.4) function effectively when using group work as a cooperative learning strategy must be used by the educator.

Approaches or models to be used in group work as a cooperative learning strategy include

- Learner Team Achievement Division (STAD) (CF 2.18.1)
- Jigsaw (cf. 2.18.2)
- Group division (G.I) (cf.2.8.3.)

5.3.2 Findings on Aim Two.

Aim two is concerned with finding out of what views educators have regarding the effectiveness of using group work as a learning strategy. The empirical investigation conducted revealed that the effective implementation of group work as a learning strategy entails well organized and cooperative structures, the fostering of positive relationships between learners and the educator, active participation of learners in their work, as key factors in effective implementation of group work in the learning environment.

The main task of educators is to organize material, space and equipment. They should be able to provide the physical environment, that is, the setting up of groups and the arrangement of equipment. Educators should know the strategies to use in implementing group work. Monitoring, supervising and assessment of learners should be done skillfully by the educator. Learners should be able to interact with each other, be accountable for their work, finish their task on time and achieve the needed outcomes.

On the question of what makes group work as a learning strategy effective and less effective, the study revealed the following factors:

- Grouping of learners;
- Giving instruction to groups;
- Checking that groups are functioning well;
- Seeing that instructions are being followed correctly; and
- Assessing progress of learners.

5.4 Recommendations.

5.4.1 Recommendation 1.

Pre-service training and in-service training should be made available to educators for the improvement of teaching and learning strategies in group work.

Motivation 1.

Educators are key ingredients for effective implementation of group work, hence workshops and courses should be conducted. Higher education institutions should ensure that curriculum and support structures should accommodate the training of student teachers to ensure that learning strategies, including group work as the major one, are accommodated. Such training will help educators to implement group work as a learning strategy successfully at school level.

5.4.2 Recommendation 2.

Educators should be enlightened on how to use group work as an effective strategy.

Motivation 2.

Most of the educators like to use groups in the learning environment, but they still lack some skills on how to implement it effectively. All skills of implementing group work effectively are emphasized by the literature and they should be well known and applied by educators.

3 Recommendation 3.

o learn and employ co-operative strategies, educators, need access to extensive
ional development.

Motivation 3.

Implementing co-operative approaches is greatly enhanced when educators have an opportunity to work together and learn from one another. As educators observe and coach each other, they provide essential support to ensure that they continue to acquire the methods and develop new strategies to their own situations. Professional development includes the following: the theory and philosophy of co-operative learning; demonstration of co-operative methods; and ongoing coaching and collegial support at the classroom level.

5.5 Conclusion.

In conclusion meticulous planning, constant monitoring, guidance and assistance characterize effective implementation of group work and careful assessment according to planned schemes that lead to desired outcomes. Supporting the ideas of many others, group work as a co-operative learning strategy seems to produce a variety of positive results at all times. These results include improvement in academic achievement, social relationships and cooperative working skills.

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APPENDIX A

SECTION A

1. BIOGRAPHICAL DATA

Kindly answer the following questions by making a cross (x) in the relevant block.

1.1 SEX

MALE	1	
FEMALE	2	

1.2 AGE

BELOW 30 YEARS	1	
31 - 35	2	
36 - 40	3	
41 - 45	4	
46 - 50	5	
51 AND ABOVE	6	

1.3 HIGHEST ACADEMIC QUALIFICATIONS

BELOW STD 10	1	
STD 10	2	
A DEGREE (B.A)	3	
HONOURS (B.ED)	4	

MASTER DEGREE	5	
DOCTORATE	6	
OTHER (SPECIFY)	7	

1.4 HIGHEST PROFESSIONAL QUALIFICATIONS

L.P.T.C.	1	
H.P.T.C./P.T.C.	2	
J.S.T.C.	3	
S.T.D.	4	
H.E.D.	5	
U.E.D.	6	
OTHER (SPECIFY)	7	

1.5 SCHOOL LOCATION

RURAL	1	
URBAN	2	

SECTION B

Kindly select the number which corresponds with your opinion by marking with an X in the relevant block.

Key:

1. AGREE
2. STRONGLY AGREE
3. DO NOT KNOW
4. DISAGREE
5. STRONGLY DISAGREE

1.6 ABILITY TO USE GROUP WORK AS A TEACHING STRATEGY

Able to divide learners in appropriate sizes	1	2	3	4	5
Able to provide learners with necessary contents and procedures	1	2	3	4	5
Learners in different groups are provided with necessary material needed to complete their task	1	2	3	4	5
Able to allocate appropriate time for the groups to finish their tasks	1	2	3	4	5
All learning groups are provided with appropriate direction to accomplish their task	1	2	3	4	5
All learners are able to focus on their tasks	1	2	3	4	5
Learning activities and learning by learners are monitored	1	2	3	4	5
Learners are spending their time listening and thinking	1	2	3	4	5

All learners are well assessed	1	2	3	4	5
All learners are rewarded after each and every learning session	1	2	3	4	5

1.7 SOME CHALLENGES REGARDING THE IMPLEMENTATION OF GROUP WORK AS A TEACHING STRATEGY

I am able to monitor whether all groups are cooperatively working together	1	2	3	4	5
Different groups function and learn independently	1	2	3	4	5
There is sufficient time for each and every group to finish their activities and reach conclusions	1	2	3	4	5
I am able to intervene learner's conflicts during group work sessions	1	2	3	4	5
Each group member is able to complete his or her task	1	2	3	4	5
Each learner is able to achieve the outcomes that were to be attained by completing the task	1	2	3	4	5

1.8 ISSUES REGARDING THE EFFECTIVENESS OF USING GROUP WORK AS A TEACHING STRATEGY

Learners learn content well and often better	1	2	3	4	5
Group work enhances the understanding of concepts	1	2	3	4	5
Learners communication skills improve (e.g. ask questions, explaining and making suggestions)	1	2	3	4	5

Group work helps individual learner to be accountable	1	2	3	4	5
Group work helps weaker learners to improve their learning	1	2	3	4	5

SECTION C

OTHER GENERAL QUESTIONS

- 1.9 What is the average number of learners in your classroom?

.....

.....

.....

- 1.10 Explain briefly why you think / do not think it is essential to use group work as one of the teaching strategy.

Learners do most of the work when they all participate. Less job for the teacher. It is easy for others to understand when they get the information from other learners. Each learner contribute to the topic during discussion.

- 1.11 Indicate in order of preference some difficulties you encounter when using group work as teaching strategy.

Active learners dominate the talking and that make shy learners not to express themselves or participate fully. Other learners rely on others. Group work is active when part of the learners understand the topic.

- 1.12 Do you regard yourself as a person who is well knowledgeable about group work and its implementation? Tick the correct answer.

YES	NO
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APPENDIX B

North West University
Faculty of Education
Private Bag X2046
MMABATHO
2735

04 October 2002

TO: The School Principals
Educators
District

Dear Participant (Educator)

Permission is hereby sought to conduct research at the School under your jurisdiction. The research topic reads: "An analysis of Educators views on their effectiveness to use group work as a co-operative learning strategy".

I would appreciate it if you could share your experience in implementing the teaching strategy, and how it affects the teaching and learning at your school.

I would appreciate your participation in this study. The information you supply will be treated in the strictest manner, therefore your name and surname are not necessary for the sake of confidentiality and anonymity.

Thank you for agreeing to participate in this endeavour.

Yours faithfully


.....
M M SESHABELA