

**THE EFFECTS OF CO-OPERATIVE  
LEARNING ON STUDENT  
PERFORMANCE IN ENGLISH AS A  
SECOND LANGUAGE WITH  
SPECIFIC REFERENCE TO  
MADADENI COLLEGE OF  
EDUCATION**

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**DECLARATION**

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and has not previously in its entirety or in part been submitted at any University for a degree.

Signature

**12 February 2001**

Date



## SUMMARY

The writing of this thesis has been an attempt to respond to the problem of students who do not seem to be able to express themselves succinctly and clearly in English. Madadeni College of Education enrolls students who have passed grade twelve, at least most of them have passed English. Their passing English at grade twelve presupposes that they can use English freely during the teaching and learning situation, for all courses are studied and presented through the medium of English.

On realising this serious handicap the researcher decided to come up with something that can probably help contribute in shaping good prospective English teachers who will in turn teach many generations to come.

There was decided on co-operative learning as the possible technique that can be used in higher education with the view to influencing students to use English practically. It needs to be stressed that co-operative learning is a learning technique or strategy (not a teaching method) that is used to make participants use English practically.

The central problem of this thesis therefore is that students fail to express themselves clearly in English. This means the sample of sixty student participants who were drawn from the primary section of teacher training got involved in practical co-operative learning activities in order to practice English in small manageable co-operative learning groups. Co-operative learning is a special type of group work where each participant is given a specific function or task to do.

Chapter 1 of this thesis explores the problem of the research and is followed by the hypothesis. The purpose of the research is spelt out that it is to examine and diagnose how co-operative learning can be used as an instrument for improving students' English-speaking skills through active and participatory learning.

The research methodology, which uses a descriptive approach becomes part of this thesis. It outlines the activities that are part of this research.

Student participants became involved in practical co-operative learning for three weeks. After these activities had been completed, a questionnaire was developed and constructed. The purpose of the study was to examine and diagnose how co-operative learning can be used as an instrument for improving students' English-speaking skills through active and participating learning. Student respondents or participants were respondents.

Chapter 2 deals with a critical review of the literature which was completed mainly to identify possible solutions and effective ways to educate the next generations about the problem.

Chapter 3 focuses on the research and the research methodology where a research design, which spells out the population sample, research procedures and the design of the questionnaire are central.

Chapter 4 deals with the presentation, analysis, and interpretation of the results. As a penultimate chapter, the researcher is able to evaluate (from student participants' responses) the success or the shortfalls of the research.

Chapter 5 focuses on the synthesis of findings, conclusions, recommendations and the conclusion of this research.



## OPSOMMING

Die skryf van hierdie tesis was 'n poging om die probleem aan te spreek van studente wat dit moeilik vind om hulle duidelik en bondig in Engels uit te druk. Die meeste studente wat met die vereiste graad 12-kwalifikasie tot Madadeni Onderwyskollege toegelaat word, het ook in graad 12 in Engels geslaag. Dit veronderstel dat hulle tydens die onderrig-en-leerproses Engels met gemak behoort te kan gebruik, maar dit is ongelukkig nie so nie. Alle kursusse by genoemde kollege word deur medium Engels aangebied.

Hierdie ernstige leemte ten opsigte van Engels waarmee die studente te kampe het, het die navorser gemotiveer om 'n bydrae te maak tot die ontwikkeling van goeie Engelse onderwysers wat vir vele toekomstige geslagte waardevolle onderrig kan gee.

Daar is besluit om koöperatiewe leer in die navorsing te gebruik as 'n moontlike tegniek wat in hoër onderwys aangewend kan word ten einde studente aan te moedig om Engels te gebruik. Daar word beklemtoon dat koöperatiewe leer 'n leertegniek of -strategie is (nie 'n leermetode nie) wat gebruik word om deelnemers te motiveer om Engels in die praktyk te gebruik.

Die kernprobleem waarmee hierdie tesis te make het, is dat studente hulle nie duidelik in Engels kan uitdruk nie. Die steekproef van 60 studente wat vanuit die primêre afdeling van onderwyseropleiding getrek is, het betrokke geraak by praktiese koöperatiewe leer-aktiwiteite, om sodoende in klein, beheerbare koöperatiewe groepe Engels te praat. Koöperatiewe leer is 'n spesiale soort groepwerk waar elke deelnemer 'n spesifieke funksie vervul, of 'n besondere taak het om uit te voer.

Hoofstuk 1 van hierdie tesis ondersoek die navorsingsprobleem. Die hipotese volg daarop. Die doel van navorsing word uiteengesit, naamlik om te ondersoek

en te diagnoseer hoe koöperatiewe leer aangewend kan word om studente se taalvaardigheid in Engels te verbeter deur aktiewe en deelnemende leer.

Die navorsingsmetodologie, wat 'n beskrywende benadering volg, is deel van hierdie tesis, en dit skets die aktiwiteite wat deel uitmaak van hierdie navorsing.

Deelnemende studente was vir drie weke lank betrokke by praktiese koöperatiewe leer. Daarna is 'n vraelys geïmplementeer. Die doel van die studie was die ondersoek en diagnose van hoe koöperatiewe leer as instrument gebruik kan word om studente se "engels-sprekende" vermoëns deur aktiewe en deelnemende leer te bevorder.

Hoofstuk 2 is 'n kritiese oorsig van die literatuurstudie, wat hoofsaaklik gerig is op moontlik oplossings en effektiewe maniere om nuwe studente aan die probleem bloot te stel.

Hoofstuk 3 belig die navorsing en die navorsingsmetodologie. 'n Navorsingsontwerp wat die steekproef, navorsingsprosedures en die vraelysontwerp uiteensit, staan sentraal.

Hoofstuk 4 behandel die aanbieding, ontleding en interpretasie van die resultate. Uit die deelnemende studente se reaksie poog die navorser om die suksesse en tekortkominge van die probleemgebied te bepaal.

Hoofstuk 5 sluit die tesis af met 'n sintese van die bevindinge, afleidings en aanbevelings van die navorsing.



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# CHAPTER 1

## INTRODUCTION AND OVERVIEW

### 1.1 INTRODUCTION

The moment a child is born, he/she is born into a “talking” society. This “talk” has serious implications for the child’s participation in communications as he/she grows up. Before a child can contribute to any formal or informal conversation he/she will learn that talking involves planned and unplanned discussions.

Colleges of Education and probably universities as well face an enormous task: that of orientating students to do things co-operatively so that they are able to gain insight into the subject through small co-operative group discussions. Once students have been oriented to know that College learning demands, a great degree of co-operative learning in order to achieve maximum success in their work, they will be able to share the knowledge among themselves with the view to improving one another’s level of speech eloquence, good writing skills and confidence. Johnson, Johnson and Smith [1991(a):1-23] observe that most things in life demand the assistance of a partner, “From the demands of a flat tire on a dark highway”, “you hold the light while I ...” “When students complete their training course they will have learnt that if one wishes to be successful in a job one has to cultivate the habit of “listening” and of getting used to “oral communications” [Johnson, Johnson and Smith, 1991(a):1-23]. It is at Colleges of Education and universities that students have to cultivate the habit of doing things together as groups, learning to edit one another’s work and making it their habit to critique one another’s work.



When students look at themselves as learners for a good purpose, like participating in co-operative learning, they will find it encouraging to work in small groups (Nattiv, Winitzky and Drickey, 1991:217). In this way students will learn that sharing is one good scholastic practice and is not the same as copying. Students will learn that every person's view or opinion should be carefully examined and be debated before it is finally accepted or rejected. Students who grow up doing this will develop skills of arguing rationally and the knowledge they acquire from co-operative learning becomes worthwhile.

It is for this reason that departments in Colleges of Education need to introduce students to lifelong learning skills. The working together of students in groups, preferably small ones, will promote higher achievement, good interpersonal relationships, positive interdependence and higher levels of self-esteem [Christison, 1990:109; Johnson, Johnson and Smith, 1991(a):2-30].

College students should constantly be reminded that through shared talk they will be able to eliminate persistent mistakes and can become confident public participants in both speech and writing.

Co-operative learning is one good example of student active participation in a learning activity in the classroom and it mirrors the real life situation outside of the College of Education context. Because most students have not had exposure to and experience in co-operative learning, lecturers need to teach students how group participation in co-operative learning can help them to improve their learning in order to achieve success. Co-operative learning demands more than ordinary group work, particularly more involvement by both the lecturer and the students. The lecturer must know what is going on in a group and be part of the discussion.



## 1.2 RESEARCH PROBLEM

Students who have been admitted to Madadeni College of Education have passed English at grade 12 level. Most of them have passed English at a higher grade. This presupposes that students who have enrolled with Madadeni College of Education have some reasonable knowledge of English, for example they know how to use it freely in classroom learning activities, class discussions, symposia and debates. However, this is not the case. Thus, the problems are as follows :

- Factors contributing to underperformance in using or speaking English at Madadeni College of Education
- Co-operative learning as instrument or strategy to improve the factors contributing to underperformance in their English language speaking skills?

## 1.3 HYPOTHESIS

Students enroll to study for the Primary Teachers' Diploma through the medium of English at the Madadeni College of Education. In addition to studying through the medium of English, they are taught English so that they become English teacher specialists when they qualify as teachers. When these students reach their third year of teacher training they do not seem to have mastered good English speaking skills.

What can make these students to be able to master spoken English? If these English students can be engaged in English activities which can demand practical participation in oral English this problem can be overcome. A co-operative English learning technique is one major activity that all English students can be engaged in. If students engage in oral English they can become motivated because all participants can be expected to have a share in co-operative learning activities thus gaining from other participants.



Madadeni College of Education students who is exposed to participation in co-operative learning activities could have mastered good English speaking skills and would be able to express themselves eloquently in spoken English by the time they finish co-operative learning activities. As prospective teachers they should be able to apply co-operative learning when they qualify as teachers.

## **1.4 THE PURPOSE OF THE RESEARCH**

The primary purpose of this research is to examine and diagnose how co-operative learning can be used as an instrument for improving students' English speaking skills through active and participatory learning at Madadeni College. Students come to Colleges of Education under-prepared for active learning and consequently they are heavily dependent upon the lecturer. When the lecturer has not been to class for some other reason students do not make use of the opportunity to do work independently. From the late eighties Universities have had to contend with the admission of more students and this trend has affected Colleges of Education "negatively" (File and Saunders, 1994:138; Moja, Cloete and Smit, 1994:98). The more students enroll at the College or University for a particular course the more difficult it is to lecture them because of the big numbers in the lecture theatres. Training prospective teachers of English whose age ranges between twenty-five and thirty years means training people who will teach for more than thirty years. If they have received good and adequate professional training in co-operative learning, then their classroom performance will be good and the learners they produce are likely to be good English speakers because learners will have been taught co-operative learning by qualified teachers who will have practically participated in co-operative learning themselves.

When college lecturers take into consideration the fact that college students' English academic background is not good because they do not show confidence when they speak it, then they have every reason to consider an alternative approach to making



them good teachers of English. The purpose of introducing students to co-operative learning activities is simple, i.e. to make them competent English speakers.

Most of Madadeni College students come from a non-English speaking background, a poor system of education and overcrowded matriculation classrooms and consequently they have not passed grade twelve well. The admission policy has affected students' performance where students with an F aggregate should be admitted. Matriculation exemption may not serve as a guarantee for a pass in higher education but it is regarded as a standard yardstick by which most students are measured, for a person who has attained a matriculation exemption is regarded as a possible competent student provided that he/she gives himself/herself time to study.

It is possible that these aforementioned and numerous other hindrances that contribute to the mediocre performance of college students in spoken English. Why do the Madadeni College students still fail to convince that they will be effective English teachers even after they have been at the college for three years?

In an attempt to answer the above question it would be appropriate to look closer at the following statements.

Conventional classroom arrangements where the teacher remains the sole producer of the subject matter has become obsolete and outdated [Johnson *et al.*, 1991(a):1-4]. College lecturers should attempt to break big classes into small teachable and manageable groups. Students should be taught that interdependence is the way of life in higher education. They should be made to realise that the real life situation is about listening, problem solving, discussion and good writing skills (Nattiv, Winitzky and Drickey, 1991:217-218). These are good lifelong learning skills which could be helpful in the mastering of everyday life essentials. Students should be made to understand that the most effective way of learning and teaching which McKeachie (1994:144) terms "students teaching other students", demands

extensive involvement in practical oral work.

Overseas English speaking countries like parts of the United States of America and England may not have experienced serious linguistic problems because they were using only English as their primary and domestic language. In South Africa, especially at Madadeni College, students' problems are different, for students use English as their second language. Problems which centre around lack of sufficient English vocabulary are likely to be central to the students' success or failure to achieve what they are expected to achieve.

It is probably the United States of America's Higher Education sector which has engaged most extensively in co-operative learning and teaching, judging from the literature they have written on co-operative learning. The United States of America's research on co-operative learning demonstrates good research exercises that have been done, good literature with largely good but some limited research on higher education (Nattiv *et al.*, 1991:217). This literature will be read and studied and on the basis of all this the researcher will be able to assess what the United States of America's Higher Education has achieved out of co-operative learning.

The objectives of this research can be summarised as follows:

- to examine and diagnose the practical use of co-operative learning in order to promote students' English speaking skills; and
- to investigate the possible effects of co-operative learning on students' oral English learning.

## **1.5 POSSIBLE VALUE OF THE RESEARCH**

The findings from this research might be useful to:



- lecturers of all subjects at college or university who teach through the medium of English because it may be assumed that once they get exposed to (through reading) co-operative learning they may start applying it in their classes;
- subject advisors who may want to use this information to run workshops on co-operative learning in order to help school teachers and encourage them to use it; and future researchers who may want to further investigate the effects of co-operative learning either in higher education or with the intention to expand knowledge of it.

## **1.6 RESEARCH METHODOLOGY**

Education is an endeavour in which training humankind prepares the next generation, for teacher training plays a significant role in enabling prospective educators to carry out what they have been taught at college and apply it throughout their teaching and learning career.

To improve the quality of education, teacher training has to find and provide more scientific ways that should help uplift the standard of its students so that they teach from a scientifically informed position.

A descriptive non-experimental approach was used as an orientation to this study. A problem situation was identified in present teacher trainees at Madadeni College of Education. A critical review of the literature was completed to identify possible solutions and effective ways to educate the next generation about the problem. From the literature review an experiment (in the form of co-operative learning activities) was designed and implemented to find possible solutions to the problem. From the descriptive approach the findings were used in order to arrive at conclusions on how to improve practice as a model for the use of co-operative

learning in teacher education.

In this research a combination of quantitative and qualitative research methods were used. The quantitative research constituted the design of the questionnaire that was quantified by the use of the tables. The quantitative approach involved a sample of sixty participants, which was 10% of the whole senior primary teacher training drawn from Madadeni College of Education students. After the data was collected it was quantified, processed and coded by the computer and analysed by using the Statistical Analysing System (SAS) at the University of Stellenbosch.

Qualitative approach constituted open-ended questions that appear on the questionnaire. As part of qualitative research the researcher had respondents involved in practical co-operative learning activities as well as a observation technique. Therefore qualitative research entails observation by the researcher of practical activities by the participants.

The research was operationalised in the manner described below:

### **CONTEXT/BACKGROUND**

- The Madadeni College of Education trained primary student teachers for a period of three years. There were six hundred Senior Primary student teacher trainees in 1997 and in 1998.
- There were sixty Senior Primary Teachers' Diploma students who participated in co-operative learning classes.

### **ACTIVITY 1**

Students were taught and were given an oral test as individuals, that is; there was no student orientation to co-operative learning at this stage. Students were taught an English didactics lesson with the topic:

- **language in the classroom.** At this stage students engaged by responding to the lecturer's questions until the lesson was finished. This teaching and



learning was known as pre-co-operative learning and testing.

## **ACTIVITY 2**

In the second activity students were introduced to and oriented to co-operative learning. All students had never been exposed to co-operative learning, therefore it was essential to give them sufficient time to understand what co-operative learning entails. Students were first told the following important aspects of co-operative learning:

- a rationale for the use of co-operative learning;
- explanation of how differently co-operative learning works from ordinary group work;
- demonstration by the facilitator of e.g. the roles that are played by such participants like the researcher, the encourager, the recorder; and
- provision of guided practice for engaging practically in co-operative learning

The essence of this activity (performing roles played by participants) was to introduce students to actual co-operative learning. Students were made to rehearse specific co-operative learning terms which they were expected to know and apply afterwards.

Students were also made to construct a church tower (in groups) after they had been given pieces of paper in an A4 size envelope.

After these activities had been completed it was assumed that students had received adequate orientation on co-operative learning, for this training took fifty-five minutes.

## **ACTIVITY 3**

This activity demanded all students to divide into twelve groups of five each. Students were told to count from 1 to 5 and start again until all of them had counted. All those students who had counted 1 belonged to the same group and so did those

who had counted 2, 3, 4 and 5. In this way group selection became fair. After students had formed groups of five each, they were given English didactics topics to discuss. Some of the English didactics topics that were discussed included; “Error correction in a second language, communicative language learning and teaching and using pictures to teach English in a grade six class”. This was the real start of co-operative learning - a first activity to people who had never been involved in co-operative learning before.

This activity can be summarised as follows:

Students tested their first co-operative learning activity where they assumed roles of a checker, an encourager, a researcher, a spokesperson or reporter and a recorder.

#### **ACTIVITY 4**

After sixty students had had twenty-two days (see chapter 3, paragraph 3.3.2.1 to participate actively in co-operative learning classes, they were each given a questionnaire to respond to. The questionnaire asked questions which were related to their being part of co-operative learning in a learning activity. After students had filled in and returned the questionnaire to the researcher, questions were coded and analysed by using the Statistical Analysis System at the University of Stellenbosch and later interpreted.

The activities on co-operative learning stretched to cover a period of three weeks and it was assumed that this gave students sufficient time to get exposed to and be part of co-operative learning.

## **1.7 LIMITATIONS OF THE RESEARCH**

The limitations will involve students learning the given learning material, preparing it in separate co-operative learning groups and presenting it through a co-operative



learning group presenter. The actual involvement of all senior primary student teachers would have provided a more appropriate diagnosis of co-operative learning, but because this research had time constraints it could have taken much longer than the set time frame.

The questionnaire had some shortfalls, therefore it did not lead to adequate responses by participants. This resulted in some questions not being correctly interpreted and understood by participants.

For the purposes of this research the researcher has read more literature on co-operative learning that comes from the United States of America. However, this does not suggest that other countries have not done any research on co-operative learning.

## **1.8 DELIMITATIONS**

The study was delimited to assessing the sixty 1998 third year senior primary teacher trainees in co-operative learning. The study was also delimited to assessing students' oral participation in co-operative learning. Oral presentation has been preferred because it is assumed that a person who is good in oral communication is likely to develop good writing skills as well. All the student teachers were studying their third year senior primary teachers' diploma at Madadeni College of Education.

## **1.9 DEFINITION OF KEY CONCEPTS**

In order to avoid possible misconceptions that may arise due to the use of certain terminology in this research, it becomes mandatory to define the following terms:

### 1.9.1 Co-operative learning

The *Oxford Advanced Learner's Dictionary of Current English* (1986:189) defines co-operation as "working or acting together for a common purpose" Johnson *et al.* [1991(a):1-14] and Johnson *et al.* [1991(b):iii] define co-operative learning as "the instructional use of small groups so that students work together to maximize their own and each other's learning". Nattiv *et al.* (1991:217) suggest this definition: 'co-operative learning' is a method of instruction in which students work together in small groups to reach a common goal. The central phrases in all the definitions are: "common purpose/goal", "working together" and "small groups". Evidently for good and commendable results to be attained, co-operative learning demands all the above-written elements. Groups have to be small to achieve the maximum goals. The smallness of the groups assists the facilitator to have good control of the students themselves, over the work done by students and, more importantly, to be able to give true evaluative results. We are looking at students who must be persuaded to believe in the value of sharing knowledge as small groups so that each one gains from others. Johnson *et al.* [1991(b):30] call this working together "two heads are better than one", while Bruffee (1995:14) calls it "learning to share our toys".

When children play with toys they obviously first have to learn from each other how the toys are used when playing with them. Once they have learnt from each other's experience they will be able to "share toys" (Bruffee, 1995:14). We can then argue that co-operation implies, "We sink or swim together" as espoused by Johnson *et al.* [1991(a):1-27]. This means that if each member of the small group has been doing his/her work with determination so that the rest of the other group members will benefit, the whole group will be successful. Should all or some members of the group fail to contribute then all members will be put at a disadvantage, for they may fail to achieve their intended goals.

Co-operative learning is a concept that demands interdependence among group



members. When students are to co-operate, they need each other's contribution. By co-operating together group members grow intellectually and quickly learn that working together can help develop one's academic and social skills (Bartlett, 1995:131).

### **1.9.2 Positive interdependence**

According to Johnson *et al*, positive interdependence implies; "students learn the assigned material and ensure that all members of their group learn the assigned material" [1991(a):3-4]. Central to this is the fact that all students (in groups) should be active and each one has to contribute so that all of them gain from each other. Students use learning materials jointly and celebrate their success jointly because each member of the group has worked hard and he/she sees himself/herself as indispensable. When students sit together to discuss, there is a "face to face promotive interaction". Johnson *et al*. [1995(b):28] argue that in positive interdependence; "students do not only become responsible for their subject matter but take into consideration the fact that other group members benefit from them". Johnson *et al*. [1991(a):3-4] and Johnson *et al*. [1995(b):28] come to some consensus point that there has to be student activity which is coupled with all members' contribution for positive interdependence to succeed. Evidently student activity demands a positive attitude (on the part of the students), sensitivity to other students' attempts, mutual assistance in case other members of the group fall short and general encouragement of all group members.

### **1.9.3 Formal co-operative learning**

Formal co-operative learning entails group discussions which may last longer than a single class discussion. Formal co-operative learning groups, "last from one class period to several weeks" [Johnson *et al*., 1991(b):iv]. In formal co-operative learning

groups the lecturer gets time to guide students on a topic, for groups remain semi-permanent for a period of time. "Formal co-operative learning groups have fixed membership" [Johnson *et al.*, 1991(a):3-4]. It is clear that once group membership is fixed there is a lot of work that a group does. The lecturer has an advantage of knowing his/her students' performance individually and collectively, distributing learning material to be shared, explaining work to the same "fixed" groups which the lecturer knows very well, and the lecturer gets time to build students trust and confidence.

#### **1.9.4 Informal co-operative learning**

Informal co-operative learning groups do not exceed a single period of the day. In informal co-operative learning the focus is on students' attention on the material to be learned. They are meant to break up the monotony of a lecturer-based learning activity and intersperse lectures with "short processing times" [Johnson *et al.*, 1991(a):5-10]. Informal co-operative learning provides an alternative to the "empty vessel" model of teaching and learning and stimulates independent thinking and development of the student.

#### **1.9.5 Base groups**

Johnson *et al.* [1991(b):103] point out that base groups are heterogeneous groups which last for a short time up to a term. They re-iterate that base groups meet regularly and members of the group provide each other with support, encouragement and assistance where needed. Base groups consist of formal co-operative learning groups. In base groups, members could be either four or five. Base groups should "hold each other accountable" [Johnson *et al.* 1991(b):104] when they do their work.



There is proof as argued by Johnson *et al.* [1991(b):13-14] that base groups should be heterogeneous across the board. This means that working with a person who is probably not a friend gives more benefits because you use a lot of time discussing relevant material. The more regularly base group members meet the more they improve their performance. It stands to reason that if base groups meet regularly they will show great improvement when they participate.

### **1.9.6 Qualitative and quantitative research**

Qualitative research entails observation, practical involvement of participants in the activities and interviews whereat the researcher gets participants involved.

The implication may be that this research methodology does not put accent on measuring but on understanding and describing. This kind of research is interpretive, therefore it is divided into two interpretations. From the theory which takes place during planning of how co-operative learning activities will be done up to the stage when student participants respond to the questionnaire. "Qualitative research is naturalistic inquiry" (McMillan and Schumacher, 1993:372). Qualitative research looks at the "use of non-interfering data collection strategies to discover the natural flow of events and processes and how participants interpret them" (McMillan and Schumacher, 1993:372). When we talk of qualitative research we are looking at a situation where qualitative research describes respondents actions. Most researchers that undertake to do research using qualitative research do so because they are concerned with understanding the social phenomenon where participants make contributions. Participants' views are taken and analysed in an appropriate context. In order to obtain good results researchers need to spend more time with participants so that they collect as much information as they can, they interact regularly with participants and record their observations.

On the other hand, in quantitative research objectivity is an important criterion used



to judge the research. Objectivity is reflected in two parts, namely validity and reliability (Holloway and Wheeler, 1997).

According to Seaman (1987) validity refers to the instrument's ability to measure what it purports to measure. It is also a judgement of the extent to which a component of research reflects the theory, concept or variable that the researcher intends.

Reliability is the extent to which an instrument when used more than once will produce the same results (Holloway and Wheeler, 1997). Others define it as the ability of the data-gathering device, scale or instrument to obtain consistent, accurate and dependable measurements (Seaman, 1987; Treece and Treece, 1986).

### **1.9.7 Second language**

Cook (1996:6) refers to second language as "A language acquired by a person in addition to his mother tongue". Kilfoil and Van der Walt (1997:4) define second language as "a language taught to be used as a medium of instruction, or as a lingua franca (a common language) among speakers of widely diverse languages" Richards, Platt and Weber (1992:108) define second language as "a language which is not a native language in a country but which is widely used as a medium of communication (e.g. in education and government) and which is usually used alongside another language or languages".

In South Africa it is difficult to define in what part of the country is a language a second language because of the uneven distribution of South African languages. A good example of this is that in the Northern Province there are more Setswana speaking people than any other racial group. In this province people get to speak Afrikaans as their second language. Kilfoil *et al.* (1997: 4) provide the definition of



a second language as a common language among speakers of widely diverse languages becomes appropriate.

### **1.9.8 Madadeni College of Education**

Madadeni College of Education is a teacher training college that trains students who have passed grade 12. These students receive training in the primary and secondary phases. The College is situated approximately 15 kilometres from the Northern Kwa-Zulu Natal mining town of Newcastle. Madadeni College trains primary school teachers but has recently been instructed by the Education Department to train about six hundred secondary school teachers as well.

### **1.9.9 Student performance**

This refers to an execution of an activity in the co-operative learning context. Students are each given a specific role to play in a co-operative learning activity and they are each expected to demonstrate that they know and understand the role they play.

The purpose of the remainder of the research is to examine each of the chapters in the sequential order.

## **1.10 CHAPTER BREAKDOWN**

The chapter breakdown will focus on the highlights that will feature in each chapter.

## **Chapter 1**

Chapter one was an introductory part of the research where the following topics were discussed:

- the research problem;
- hypothesis;
- the purpose of the research and research methodology;
- limitations of the research;
- de-limitations;
- definition of key concepts; and
- concluded with the chapter breakdown.

## **Chapter 2**

Chapter 2 focused on the review of the literature. The following aspects of literature review will be discussed in detail:

- an introduction;
- rationale for the use of co-operative learning;
- elements of co-operative learning;
- learning outcomes promoted by co-operative learning;
- possible problems with the use of co-operative learning;
- formation of co-operative learning groups;
- co-operative learning strategies; and
- the conclusion.

## **Chapter 3**

Chapter 3 deals with the research design and research methodology. This commences with an overview of the research after which a discussion of the research design follows. The chapter continues to discuss some observations made during co-operative learning activities, the questionnaire design, method of analysis of the completed questionnaire and ends with the conclusion.



## **Chapter 4**

Chapter four focuses on the presentation, analysis and interpretation of the results of the research. The chapter concludes with a summary of the results.

## **Chapter 5**

Chapter 5 serves as a concluding chapter with the synthesis of the findings, conclusions, recommendations and conclusion.

## **1.11 CONCLUSION**

This research embraced teacher trainees who were drawn from the third year Senior Primary Teachers' Diploma level at Madadeni College of Education. It is believed that the research findings and the body of knowledge attained from the research will make a contribution to those who may wish to make use of an alternative approach to teaching and learning in higher education.

“If teacher educators want future teachers to learn the strategies of co-operative learning, they must demonstrate its use in teacher education classes” (Nattiv *et al.*, 1991:217). The more college lecturers engage college students in co-operative learning activities the more will college students apply it in their respective schools once they qualify as teachers. The chapter introduced the concept of co-operative learning. This was followed by the research problem, the hypothesis, the purpose of the research, research methodology, limitations and de-limitations of the research, definition of key concepts, chapter breakdown and ended with the conclusion.

The next chapter will introduce the literature study or the review of the literature on which this study depends.

## CHAPTER 2

# AN OVERVIEW OF SOME OPERATIONAL ASPECTS OF CO-OPERATIVE LEARNING: A REVIEW OF THE LITERATURE

## 2.1 INTRODUCTION

The previous chapter introduced the concept of co-operative learning which comprised the following topics; the research problem, hypothesis, the purpose of the research, research methodology, limitations and de-limitations of the research, definition of key concepts, the chapter breakdown and ended with the conclusion.

The fundamental aim of this chapter is to review the literature underpinning the theoretical perspective of this research. This literature review served as a frame of reference throughout the research. For the purposes of this research the researcher has read more literature on co-operative learning that comes from the United States of America.

Johnson *et al.* [1991(a):1-16] point out that in the United States of America co-operative learning does not serve as a new concept which needs to be explored but it is "an old idea". Co-operative learning has always received attention in the United States of America since the early 1900s as Johnson *et al.* [1998(d):29] argue, although most of it concentrated mainly on schools. There is however, a belief as argued by Nattiv *et al.* (1991:216) that studies on co-operative learning that include higher education have not been sufficient. However, care will be taken to review



what most authors espouse and from the literature study conclusions will be drawn, summary and findings of the research will be reached.

For the purposes of this research, the following aspects will now be discussed: rationale for using co-operative learning with teacher education, elements of co-operative learning, learning outcomes promoted by co-operative learning, possible problems with the use of co-operative learning, the formation of co-operative learning groups, co-operative learning strategies and conclusion.

Rationale for using co-operative learning with teacher education will now be discussed.

## **2.2 RATIONALE FOR USING CO-OPERATIVE LEARNING WITH TEACHER EDUCATION**

If there is a need for any exploratory research to succeed there has to be a rationale for its use. There are numerous reasons for using co-operative learning including reasons for the establishment of a co-operative learning centre at a college. When co-operative learning was first thought to be a viable progressive approach to effective teaching and learning, people had to put it on experimentation and observe students' behaviour after engaging them in co-operative learning. The result was the noticeable shift away from competition to social interdependence as is argued by Johnson *et al.* [1998(d):28].

In some parts of the United States of America like at the University of Minnesota they have succeeded to establish a Co-operative Learning Centre (see notes: Co-operative Learning Centre, page 120 of the bibliography). The rationale behind the establishment of the Co-operative Learning Centre becomes clear and obvious here. The fundamental aim was to establish and promote the study and the use of co-operative learning through research. Kohn (1987:54) in writing about the profile



of Johnson and Johnson comments about the statement one of the two Johnson brothers makes that "No one is as smart as all of us". People have got to be taught why co-operative learning should be used at an early stage so that they will understand it right from the start. We need collective contribution in order to succeed in life. Nattiv *et al.* (1991:217) point out that the rationale for the use of co-operative learning with teacher education may come into operation as a result of the following essentials: classroom research, students learning styles and societal needs. Co-operative learning demands recognition and credibility and as a result the creation of such centres which will help workshop people to try and apply it at colleges can be looked at as an achievement. People who may want access to co-operative learning and teaching material can readily get it from existing co-operative learning centres. This research seeks to recommend that a co-operative learning centre, if established at a college or University be used as a centre to promote the study and use of co-operative learning in higher education.

### **2.3 ELEMENTS OF CO-OPERATIVE LEARNING**

The theme of the research was to examine the effects of co-operative learning on student learning in oral English as a second language. Students' oral English competence was tested through their involvement in co-operative learning activities.

Figure 2.1 portrays co-operative learning as central. For the purposes of this research the overview of Figure 2.1 will concentrate on academic gain and effective communicators as the final outcomes of co-operative learning as a process. The diagram purports the following dynamics; students who are involved in co-operative learning are characterised by skills and attention. This means that they have the will to learn and as a result they have developed skills to learn (see Figure 2.1). Skills and attention make students involved in co-operative learning to know and internalise the principles or elements of co-operative learning.



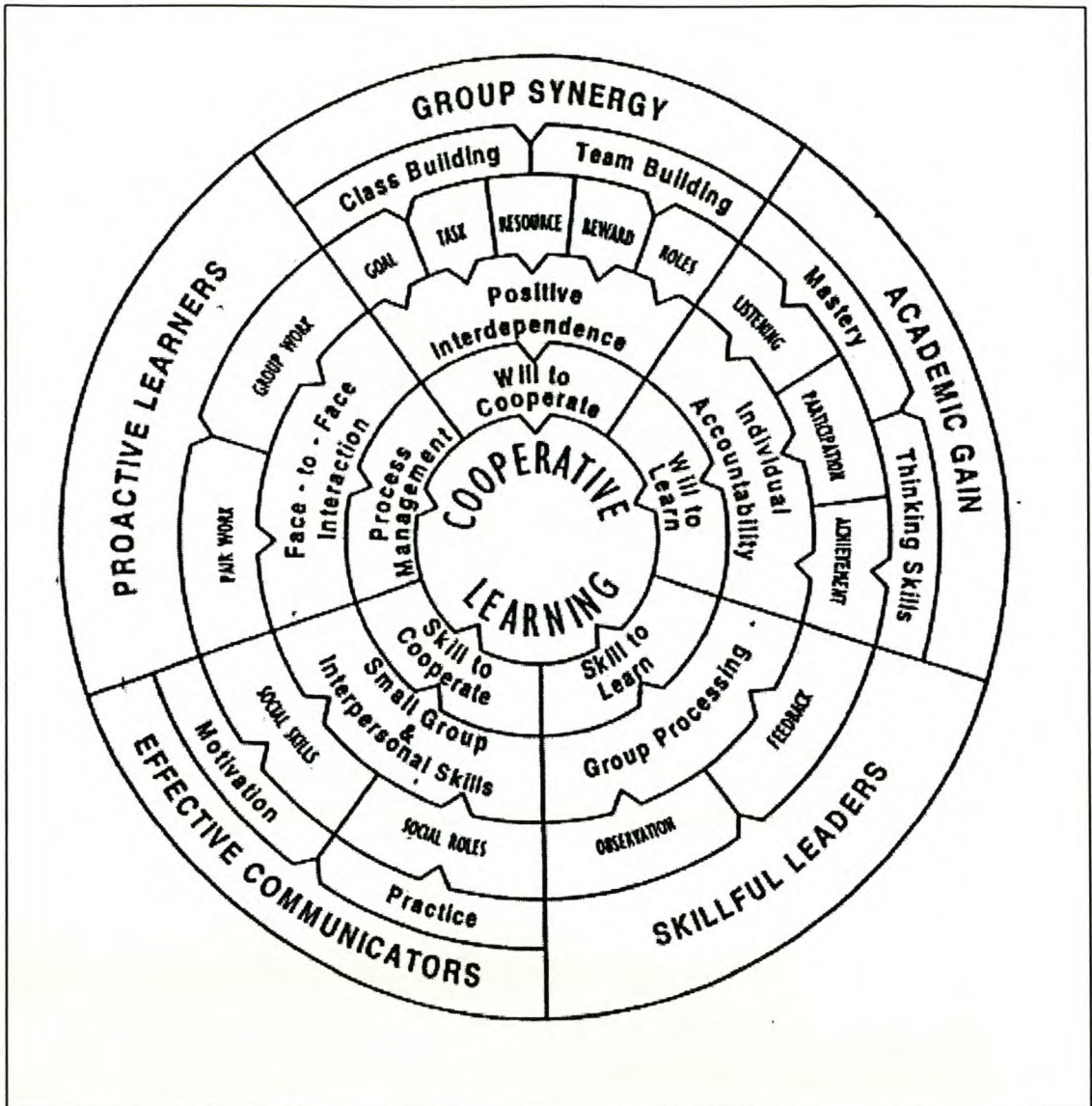


FIGURE 2.1: ILLUSTRATING GROUP PROCESSING AND ACHIEVEMENT

(Source: Yager, Johnson, Johnson and Snider, 1986:393)

These principles are:

1. Individual accountability
2. Small group and Inter-personal skills
3. Face-to-face interaction
4. Positive Interdependence and
5. Group processing.

(Yager, Johnson, Johnson and Snider, 1986:393)

The processes of involvement in co-operative learning include good listening, aim to achieve, social skills and social roles. These processes develop to mastery learning, thinking skills, and motivation to participate and practice. The end result of co-operative learning is that students gain academically and they also become effective communicators.

For co-operative learning to work, five key concepts in constructing become indispensable. These key elements, which are discussed for the purposes of this study, become indispensable because they are cornerstones of co-operative learning without which activities are likely not to succeed.

### **2.3.1 Positive interdependence**

Johnson *et al.* [1991(a):1-18] define positive interdependence as an exercise that makes students believe that they are “linked with others” and that each member of the group is dependent upon the others in order to overcome the intricacies of co-operation. If one member of the group has not read and understood learning material thoroughly to present it during group discussions, the group as a whole may be negatively affected. When students have been given a problem to solve during the learning period, “they agree on the solution and strategies for solving each problem” [Johnson *et al.*, 1991(a):1-19].

A good example of positive interdependence is when the facilitator assigns group members with a role each, e.g. a group could have a reader, whose duty it is to read learning material aloud to the whole group. Another role that can be given to the student is that of a checker, who ascertains if all members can explain how to solve each problem correctly [Johnson *et al.*, 1991(a):1-19]. Bartlett (1995:132) uses slightly different terms but with the same duties performed by a member of the group. He uses the following terms: “recorder”, “encourager” and “elaborator” Bartlett (1995:132) argues that participating students can play each role

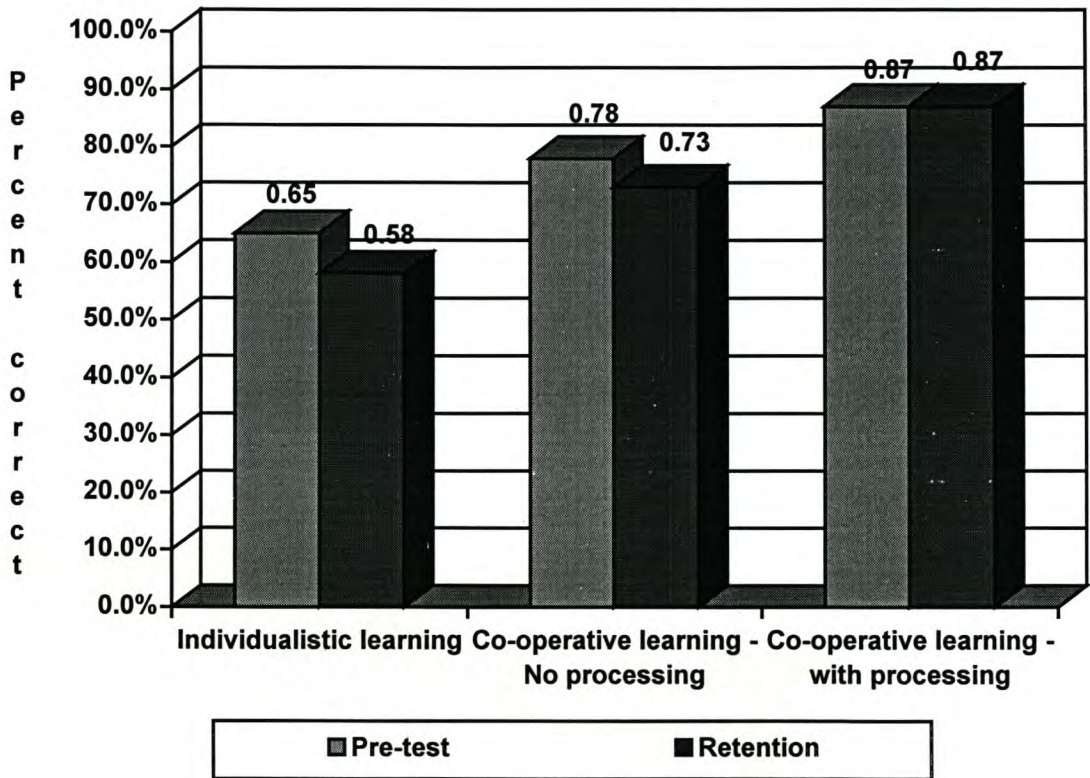


interchangeably i.e. students should be made to know that they are linked with others and one cannot succeed unless the other members of the group succeed. The roles that are played by each participant, which have been discussed above are essential to mention and discuss because they form part of this research. Participating students become “experts” in presenting well prepared and well studied learning material. Since in positive interdependence each group member has had a specific role to play, he/she has mastered most of the learning material during the presentation time. In fulfilling the mentioned roles, student participants become positively interdependent on one another and they cannot learn or grow unless each group member completes their work. Research studies as presented by Johnson *et al.* [1991(a):17] have proved that all elements of co-operative learning are interrelated e.g. positive interdependence has as its component the **will to co-operate**, promotive interaction (which will be discussed later) has as its component **process management**, individual accountability has as its component the **will by students to co-operate**, group processing has as its component **skill to learn** and the small group and interpersonal skills has as its component the **skill to co-operate**. This interrelatedness which shows interdependence among all five key elements is clearly illustrated in figure 2.2. Students become more interdependent by helping one another and by supporting one another’s effort to participate.

Figure 2.2 illustrates the following important aspects of positive interdependence: positive goal interdependence where each group member has a clear contribution to make. This he/she does from the given material which the participant learns with the aim to master. The student participant gets told by the facilitator that he/she learns the learning material for himself/herself and other group members; positive reward interdependence where the facilitator might want to reward the group jointly, as is argued by Johnson *et al.* [1991(a):17] in order to supplement positive goal interdependence. At times facilitators give student participants a group grade for the overall production, individual rewards resulting from tests and bonus rewards if all members of the group achieve up to the criterion on the tests; in positive resource interdependence, student participants could be given limited learning resources so



that they share, or student participants might be given part of the required learning resources. In this way the facilitators' aim is to make students to come together at some stage in order to share the limited resources. This indicates how co-operative learning becomes successful and; the positive role in which the facilitator creates roles that demand interdependence among student participants. Johnson *et al.* [1991(a):17] mentioned the role of the checker (of understanding).



**FIGURE 2.2: GROUP PROCESSING AND ACHIEVEMENT**

(Source: Yager, Johnson, Johnson and Snider, 1986:397)

Figure 2.2 illustrates the interdependence of all the five elements of co-operative learning. The diagram further strengthens the point that all elements are each a necessary part of a whole.



Positive interdependence therefore means that students interests are bound together. They can each succeed only if others succeed because they are committed to one another's success. Kohn (1987:54) argues that "there is a built-in incentive to help, to accept help, to root for others".

### **2.3.2 Face-to-face promotive interaction**

Johnson *et al.* [1991(a):3-7] define face-to-face promotive interaction as "individuals encouraging and facilitating each other's efforts to achieve, complete tasks and produce" Bartlett (1995:133) defines face-to-face promotive interaction as "a student actively promotes the learning of another student by encouragement" The face-to-face learning is promotive in the sense that students become more interdependent, that is, students help one another and support one another's effort to participate. In face-to-face promotive interaction each student takes full responsibility to assist another student by encouraging him/her to go and read given learning material and prepare the same learning material for group discussion, or to explain to each other how to solve problems, teach their knowledge to group members and finally group presentation. In a co-operative learning group interaction, students do not look upon themselves as different participants but as a "family that should share learnt material". In face-to-face promotive interaction students do not have to confine their co-operative learning discussion to classroom time but can extend it to out of class. "Instructors would be willing to give up lecture time if they knew that students learn more from the interaction than they lose from the shortened lecture" (Bartlett, 1995:133). Johnson *et al.* [1991(a):3-7] argue that promotive interaction is as a result of positive interdependence that is inculcated during the division of roles that are to be played by each member of the group e.g. a recorder (whose duty it is to record the group's ideas), a checker (whose duty it is to check if all members of the group have read and participated in the learning activity) and Bartlett (1995:133) and Johnson *et al.* [1991(a):3-7] share the same view that individuals in the group "encourage", "show concern" and are "caring" for



the learning of each member of the group.

Both authors talk about feedback as central in their discussion probably because it is during feedback where each member will put on the table all that he/she has read and understood from the material given. Other members get an opportunity to listen critically to other group members' perception of the problem. Those group members who do not show strength in their argument get assistance from others. The face-to-face interaction becomes the period of "processing information" as Johnson *et al.* [1991(a):3-7] put it. During promotive interaction students challenge each other, argue on a point as they are "influencing each other's efforts" [Johnson *et al.*, 1991(a):3-7] mainly to achieve a mutual goal.

Face-to-face promotive interaction is a critical participative exercise where students become critical listeners and speakers because they want to encourage, assist and help others in the processing of information.

As can be seen in Figure 2.1 the face-to-face promotive interaction is a phase of process management where students who are engaged in pair work and group work do these activities with the view to achieving something. The outcome of face-to-face promotive interaction is an activity that results in participants being proactive learners.

### **2.3.3 Individual accountability**

Johnson *et al.* [1991(a):3-8] define individual accountability as "the key to ensuring that all group members are in fact strengthened by learning co-operatively". Bartlett (1995:133) looks at it as " various methods that have been tried out to ensure that individual students work up to their capabilities". These two definitions may be summarised as follows: each member of the group is expected to do his/her best when preparing learning material so that he/she does well when the time comes for



presentation, summarising or reviewing groups' discussions.

After co-operative learning groups have been given a topic and relevant material to go and study, individuals in respective groups are expected to participate by preparing the given material. Groups assign individual group members with tasks to go and perform. When members of a group come together for a discussion each member of the group presents his/her prepared material. It is during this period where group members get to know who has done sufficient preparation or who needs more assistance from others. The contribution a member makes either boosts the group (if it is well done) or lets the group down if he/she did not prepare well. A group may then discuss possible ways of assisting those group members who do not seem to show good understanding of the given material. Individual accountability helps curb possibilities of 'hitch-hikers' [Johnson *et al.*, 1991(a):3-8]. By "hitch-hikers" Johnson *et al.* [1991(a):3-8] mean "when it is difficult to identify members' contributions, when members' contributions are redundant", members sometimes seek a free ride. An individual who has studied, and prepared his/her learning material thoroughly becomes an asset in the group, for when group presentation is made he/she knows that his/her individual contribution has made a mark. Bartlett (1995:133) calls individual accountability a means to avoid the "hitch-hikers". These are students who do not participate to the best of their abilities. In individual accountability there is a lot of student feedback where each student tables what s/he has read and in turn other group members ask him/her questions.

Individual accountability demands of a group participant to prepare given material very well so that group members gain from his/her presentation. A student does not depend on others if he/she has done his/her homework, for he/she knows that the work he/she will present will give a good impression to both his group members and the facilitator. To check if individuals are accountable the facilitator needs to constantly call on individuals to present their group's answers, or to give an oral test. This is normally done while group work is being monitored.

In Figure 2.1 it is clearly illustrated that good characteristics of individual



accountability start with an individual who listens and participates with the sole aim to achieve. Achievement here refers to an individual who will convince group members that s/he has read sufficiently by responding freely to questions asked and by presenting his/her learnt material to the group with confidence. An individual who has read learning material thoroughly, displays signs of confidence through participation and presentation possesses skills of academic gain.

### **2.3.4 Interpersonal and small group skills**

Bartlett (1995:134) looks at interpersonal skills as related to “social skills” while Johnson *et al.* [1991(a):3-9] call social skills “group skills”. Bartlett (1995:134) transcends the four walls of the classroom and has included the society at large probably as a reminder that we teach students to participate in the larger community. Co-operative learning prepares students to be able to converse freely in the world. Interpersonal group study demands that students create time to meet and also to monitor each member of the group’s progress all the time. It is interesting to note that Johnson *et al.* [1991(a):3-9] mention the phrase “social skills” which the students should be taught for “high quality collaboration”. They further contend that “social skills are the key to group productivity” [Johnson *et al.*, 1991(a):3-9]. Social skills as defined by Johnson *et al.* [1991(a):3-9] means students must: “get to know and trust each other, communicate accurately and unambiguously, accept and support each other to resolve conflicts constructively”. Interpersonal and small group skills prepares students for such qualities like leadership, decision-making, trust-building communication and conflict-management Johnson *et al.* [1991(c):21] as can be seen on Figure 2.1. Once social skills have been mastered in the college classroom qualities like high achievement can be attained as Johnson *et al.* [1991(c):21] maintain. Students get taught ways and means of communicating with others, while this goes on they unconsciously get trained to be able to be effective communicators.



If carefully taught in the college classroom, interpersonal and small group skills can successfully promote mutual trust among students, students can learn to communicate appropriately and accept and support each other as participants in a group.

### 2.3.5 Group processing

Johnson *et al.* [1991(a):3-10] define group processing as "reflecting on a group session to, describe what member actions were helpful and unhelpful, make decisions about what actions to continue or change". From this definition a deduction can be made that students do not learn for today but for the rest of their lives. All that students discuss will be "filed" and be re-discussed among themselves after some time mainly to look into possible ways of improving on the group's previous performance or to look for possible ways to correct what may have been the cause of the group's poor performance. Strictly speaking group processing can be equated to digesting actions which have happened and gone. When an individual sits alone in the quiet to rethink what happened earlier, he/she is able to form a mental picture of what went wrong (if there is) and what made him/her succeed. The case is exactly the same with students who sit and re-visit what they have done previously. Group processing in this case becomes indispensable. This reflection on the work done may help those students who may not have done well to improve as is illustrated in Figure 2. Yager in Johnson *et al.* [1991(a):3-10] examined the impact on achievement of:

- (a) co-operative learning in which members discussed how well their group was functioning and how they could improve its effectiveness;
- (b) co-operative learning without any group processing, and
- (c) individualistic learning. The results indicate that the high-, medium-, and low-achieving students in the co-operation with group processing condition achieved higher on daily achievement, post instructional achievement and retention measures than did the students in the other two conditions.



Students in the co-operation-without group-processing condition, furthermore, achieved higher on all three measures than did the students in the individualistic condition.

Positive questions that students may ask themselves during processing may include:

- (a) "What did we each do to be successful in our presentation?"
- (b) "What do we need to do to make the group to perform better in future?"

The main aim of the discussion of the foregoing basic co-operative elements was to highlight their importance as component parts of co-operative learning. When looked closer, they show discernible commonalities like; students have to come together to discuss something, all students become participants for a common purpose, there is live interaction, as students discuss they learn to be supportive of one another and in particular, group processing teaches student participants to develop qualities of leadership, and they get prepared to be able to deal with conflict management. For the purpose of this research and upon reaching a conclusion that the five co-operative learning elements have common features, the researcher has come up with a simple diagram that has been drawn from the readings of all five basic elements of co-operative learning comes from Johnson, Johnson and Smith (1991:125)

Having discussed the five basic elements of co-operative learning, the researcher will now discuss the outcomes promoted by this co-operative learning.

The three types of co-operative learning are the foundation on which co-operative learning is based. They do have differences in that some are meant to relieve students from a lecturer-based learning and teaching like informal co-operative learning and teaching but their fundamental aim is common. It is to foster the internalisation of the concept of co-operative learning, especially in higher education. Common to them all is the role of the facilitator whose role remains the same on all the three types of co-operative learning.



## 2.4 LEARNING OUTCOMES PROMOTED BY CO-OPERATIVE LEARNING

An outcome is a visible result of an effort to try and achieve something.

Co-operative learning is learning using students in an activity; therefore participants should be able to achieve something after they have been part of it. The specific outcomes promoted by co-operative learning are a result of people who participate in activities with the aim of achieving just this: outcomes!

When students put their heads together in a co-operative learning activity the researcher or the facilitator expects them (students) to become changed by the time they accomplish the task they are doing. Ramsden (1994:101) argues that when students co-operate in order to prepare to discuss an assignment or some task they “perceive their activity to be useful for understanding the content to be learnt and use their deep approaches to learning it”. He further argues that the co-operative learning activity of assignment writing became related to higher quality learning outcomes.

When students have been participating in a co-operative learning activity, they yield outcomes that are a direct result of their activities.

The results of student involvement in co-operative learning activities have proved to be successful as Manera *et al.* (1989:56) point out. They argue that students own the content. Christison (1990:9) uses the term "benefit" to mean good results that are brought about by the use of co-operative learning strategies. Barratt (1992:202) argues that co-operative learning is just as viable and as beneficial to both the students and lecturers.

As co-operative learning is such an extensive topic, the learning outcomes that will be discussed will be limited to six only for the purposes of this research.



### **2.4.1 Improved academic achievement**

Christison (1990:9) conducted research which involved twenty-seven studies where she was “investigating the effects of co-operative learning programs on student learning” in a college. Of the twenty seven studies investigated nineteen showed a significant positive effect on student learning. “Most studies show that high, average and low achievers gained equally from the co-operative experience” (Christison, 1990:9). McKeachie (1994:145) points out that “the superiority of student-led discussion was particularly marked for students below the median ability”. Students who constantly participate in co-operative learning activities become motivated to do their work because these learning activities involve them and are conducted by them. Johnson et al [1991(a):2-12] and Johnson *et al.* [1981(c):51] agree that co-operative learning “promotes higher achievement than does competition” Frierson (1986) in Nattiv *et al.* (1991:218) state that “African-American nursing students studying co-operatively achieved higher scores on state nursing exams than a control group studying independently”. These researched studies proved that when used with clear understanding, co-operative learning can gradually improve confidence of and motivate participating students. Students like doing things and as a result they become encouraged by being involved in activities that demand the use of co-operative learning.

### **2.4.2 Enhanced student retention**

Students enroll with the colleges and universities to study and spend some time in order to complete their studies. Johnson *et al.* [1991(a):2-19] argue that undergraduate students decide to leave higher education because nobody cares who they are. They further strengthen their argument by saying that the major reasons for students to drop out are “failure to establish a social network of friends and to become academically involved in classes”. For the purposes of this study retention therefore means a lower ‘drop out’ rate on the part of students.



When students participate in co-operative learning group discussions, they usually plan, discuss, and divide participatory responsibilities among themselves. Participatory responsibilities include those of an encourager, a co-ordinator, a recorder and a spokes-person or a presenter. This gives them the opportunity to discuss a point or points more than once and ask one another information which needs clarification. Since they hold discussions as groups, they listen to each other attentively. While they do this, retention is enhanced (Manera *et al.*, 1989:53). Also the point argued by Johnson *et al.* [1991(b):47] is worth taking note of that when students participate in co-operative learning discussions regularly, "the processes of social involvement, integration, and bonding with classmates are strongly related to higher rates of retention". Through co-operative learning group discussions high, average and low achievers are able to achieve because they have been part and parcel of co-operative learning discussions. Co-operative learning "allows for significant amounts of meaningful student discussion that enhances students' satisfaction with the learning experience and, in so doing, promotes student learning" [Johnson *et al.*, 1991(a):2-20]. This meaningful student discussion "promotes student retention" as is argued by Johnson *et al.* [1991(a):2-20].

### **2.4.3 Development of higher reasoning techniques**

Students get involved in co-operative learning activities more than once. The more they participate in co-operative learning, the more they become sensitised to get to know complex ways to argue and engage in sophisticated talks. Higher reasoning strategies implies getting involved in deep and sophisticated argument and conversations.

Manera and Clockhamer (1989:53) argue that "when students become active participants in co-operative learning group discussions, they develop higher reasoning strategies such as analysis, evaluation and application. In short, the foregoing argument holds that approaches which involve students in a spirit of co-



operation makes them to be able to master the knowledge, interpret other people's talk en route to perfecting co-operative learning skills". Gruber and Weitman (1962) in McKeachie (1994:145) point out that students who have participated in structured student-led groups, "did at least well on a final examination" and these same students were "superior in curiosity" and in interest in educational psychology. This is another indication that students who have been actively participating in co-operative learning activities are able to study, retain what they have learnt, and are being made ready to critique the examination learning material they study and to critique their group members during co-operation and in social life.

#### **2.4.4 Improved articulation of ideas**

Becoming involved in co-operative learning should make a participating student grow in the ability to be coherent in speech. Co-operative learning teaches students to learn to put their case/argument clearly and an argument which is free of any ambiguity. Intuitively students who have been part and parcel of co-operative learning develop such virtuous qualities like conciseness and crispness when they express themselves orally.

Practice makes perfect. When students enter into discussions they become acquainted with correct ways of formulating questions and statements. This practice makes them improve their ability to articulate ideas (Manera *et al.*, 1989:53). Articulation implies that students who have got used to co-operative learning are able to express ideas clearly and succinctly whenever they want to argue a point.

#### **2.4.5 Improved acceptance of responsibility for own learning**

When students actively participate in co-operative learning activities, one of the main underlying intentions is to encourage them to be able to be responsible for



their own learning. This activity in which students participate is done consciously or unconsciously that is, some students may participate in co-operative learning activities because they have each been given a specific role to play. They may be unaware that their being part of the learning activity is intended to make them grow mentally. Bartlett (1995:139) and Christison (1990:9) hold that students who participate in co-operative learning activities make this a “responsibility for their own learning.” When students become responsible for their own learning, they do so because they share ideas during discussion sessions (Bartlett, 1992:202). During discussion sessions they share ideas as they prepare to present an activity as a group. Nattiv *et al.* (1991:217) argue that in the classroom research “students participate and assume greater responsibility for their own learning”. Cowley (1989) in Ramsden (1994:175) relates how the benefits of problem-based learning can be derived from a course introduced. He argues that students were made to “tackle the problem in groups of three or four providing an opportunity of co-operative learning”. This lesson continued with students doing all the work independent of the teacher. He noticed a “gradual shift of emphasis away from dependence to independence”.

In the foregoing practical example of co-operative learning students feel at ease once they are made to work independently. Working independently makes students realise that after all co-operative learning in groups will benefit them even more because what they study or discuss is for their own benefit. This is one tiny example where responsibility for own learning becomes enhanced.

#### **2.4.6 More positive self-esteem**

For the purposes of this research, self-esteem refers to a student who holds high regard for himself/herself because of the participative role he/she played in co-operative learning activities.

Christison (1990:9) argues that research studies on co-operative learning include



measures of student self-esteem because it is “assumed that students in co-operative groups will feel more liked by their classmates because of the increased opportunities to interact”. The more students interact in co-operative learning activities with other students, the more confidence they gain. “Through co-operative learning strategies, students can become true partners in the learning enterprise” (Christison, 1990:8). Nattiv *et al.* (1991:217) argue that participation in co-operative learning class discussions produces gains in self-esteem. Improved self-esteem is an outcome of co-operative learning activities. Students who are made to engage regularly in co-operative learning will develop self-esteem.

Johnson *et al.* [1991(b):53] argue that self-esteem subscribes to the maxim that “if I win, then I am worthwhile as a person, but if I lose I am not”. The contribution made by co-operative learning is immense when people’s attitude gradually change to positive.

Students who are active participants in co-operative learning groups receive “greater social support” from the college or community [Johnson *et al.*, 1991(a):2-30]. This social support encourages more positive self-esteem on basic self-acceptance on the part of the student. Positive self-esteem comes from “peers, from being liked, accepted and connected” (Kohn, 1987:54). He further argues that positive self-esteem makes children feel better about themselves because they do good work together.

People who want to cross the river or a busy street successfully, usually decide of possible strategies to use in order to do that. One example of doing this successfully can be to decide to hold each other’s hand so that whatever happens to them occurs when they are together. Once they encounter problems in the middle of their ‘journey’ they think of possible strategies to employ in order to overcome the said problems. These strategies will help them trudge the journey to the end. Their reaching the destination becomes an outcome of their initial plans and strategies they thought of using become vehicles which lead to their success.



Just as people who want to cross the street wrestle with ideas of avoiding possible danger, when carefully learnt and internalised co-operative learning demands help of other people. People have to work together in order to succeed the same way as is shown in the discussion of co-operative learning outcomes above.

## **2.5 POSSIBLE PROBLEMS THAT CAN BE ENCOUNTERED WITH THE USE OF CO-OPERATIVE LEARNING**

There are four salient problems which authors cite. Manera *et al.* (1989:53) contend that the first problem is that "frequently, teachers view group activities as a variation which provided relief from the drudgery of 'real' learning". This may mean that there is still a large number of college or University lecturers who still adhere to traditional teaching methods where students have to assimilate given knowledge. Barrat (1992:20) calls individual working students " ... students doing their own work quietly".

When work is done individually and competitively there is perfect tranquillity for individuals to memorise facts simply as they are probably with little or no understanding. The problem is that when college lecturers look at co-operative learning as a period when they can do their things while they assume students are engaged in co-operative learning then co-operative learning suffers. Co-operative learning suffers because as Manera *et al.* (1989:53) argue that lecturers view co-operative learning as a relief from lecturer-centred learning. In this case lecturers still believe that the real learning and teaching is when they are in control of the subject content.

The second problem Manera *et al.* (1989:54) argue about is that of "traditional groups working in isolation", which means students are encouraged to cultivate the habit of working as individuals and get one diligent student to do all the work including presenting for the group. "Working as individuals does not profit all



students in a class. It promotes an unnecessary competition and students work independently and compete for recognition with their peers” (Christison, 1990:9). The problem which Manera *et al.* (1989:54) focus on is that group work and co-operative learning are two separate approaches to learning. Simply putting students together does not mean students are engaged in co-operative learning. Co-operative learning principles demand all students to work together after the facilitator has clarified all the appropriate basic facts. To get this problem solved, lecturers should know and understand how co-operative learning works.

Bitzer (1999:11) quotes the problem of students who have reportedly been resistant “to taking increased responsibility for the learning process “because they have grown accustomed to lecture-based approaches which require them merely to take in and recollect information”. This is probably one of the major problems because any lecturer who wishes to succeed in teaching co-operative learning should try as hard as possible to convince students so that they see the need for co-operative learning.

The third problem which contributes to the limited use of co-operative learning is that there has not been sufficient literature on co-operative learning for higher education. There is a strong possibility that those lecturers who still believe in lecturer-centred approaches to learning have not given themselves time to look for appropriate literature which can influence them to change their ways of teaching. They cannot apply other approaches to learning like co-operative learning because they may not want to change. The central problem which specifically affects higher education is that they fail to use co-operative learning because they have not had exposure to it. To re-iterate this point, insufficient literature on co-operative learning in higher education is one such problem which contributes to the limited use of co-operative learning in the classroom as suggested by Manera *et al.* (1989 :54) and Nattiv *et al.* (1991:218). There needs to be more research done on the use of co-operative learning in higher education.



## 2.6 POSSIBLE WAYS TO ENCOURAGE STUDENTS TO BE PART OF CO-OPERATIVE LEARNING

Just as the advertising agency would like their product to be sold quickly and fast by using crisp and catchy language, an enthusiastic facilitator should encourage students to be part of co-operative learning. How does he/she do this? First students must be made to see the value of co-operative learning through demonstrations by the facilitator. The facilitator should highlight the important aspects of co-operative learning in order to attract students. Christison (1990:8) states that foreign English students come to the United States of America's class expecting the "traditional classroom arrangement", while Barrat (1992:201) argues that foreign students "had little experience in co-operative learning situations". Barrat (1992:201), McKeachie (1994:144) and Christison (1990:7) put more emphasis on the explanation of working together by students. They all postulate that students should get thorough and clear explanations why co-operative learning is preferable to the lecturer-centred teaching and learning. Students may fail to master co-operative learning skills if college lecturers do not give clear instructions on how it should be done. The following is just one example that could be adopted if co-operative learning is to work successfully.

A rationale for using co-operative learning has to be provided to students. Co-operative learning is a "... departure from conventional instruction" (Nattiv *et al.*, 1991: 217). Students may resist any change of teaching and learning that is contrary to what they are used to if a rationale for the use of co-operative learning is not made strong enough. The facilitator can make many demonstrations and involve students in co-operative learning activities. After students have participated in a learning activity, a facilitator can assess them by providing them with a short and simple questionnaire which will want them to highlight differences between conventional learning and co-operative learning. The questionnaire could put accent on co-operative learning activities done during co-operative learning against a lecturer-centred lecture.



How should students be made to see the value of co-operative learning before they participate? Students can be made to work individually and report their tasks once they have finished. Then the same students can be involved in co-operative learning groups afterwards and be made to report through the chosen presenter. After all this the facilitator can emphasise statements and questions which centre around; benefit from others (co-operative learning), dependent on the lecturer (lecturer-centred learning). By asking them (students) the facilitator will make students notice the differences between co-operative learning and other non co-operative learning strategies. The facilitator can further explain to students that when they learn by engaging in co-operative learning they do not feel the pressure e.g. a lecturer wanting them to get finished with his/her work at a specific time. Such explanations encourage students to want to work independently and not to depend on teachers as “sources of knowledge” as is argued by Ramsden (1994:29).

When people are born, they are not born “instinctively knowing how to co-operate with others” (Christison, 1990:6). College students can only work with understanding where the task is well defined. They need to be told clearly why co-operative learning should be used as an alternative approach. Explanation of the value of co-operative learning includes the roles played by each member of the group e.g., a recorder, a researcher and a presenter or spokesperson. Students should get thorough explanations of what the role of each person is in co-operative learning. The facilitator should demonstrate almost all roles expected to be played by each student. By demonstrating how roles are played the facilitator will be removing anxiety students may have. Since co-operative learning is not simple group work students need to understand it clearly so that when they participate in co-operative learning activities they do so with confidence. Lombard and Koen (1999:3) suggest that students need to receive training before they even become involved in co-operative learning. This suggestion reinforces arguments by Barrat (1992:201), Ramsden (1994:29) and Christison (1990:6) who all argue that explanation of how to participate in co-operative learning should precede the actual participation.



## 2.7 TYPES OF CO-OPERATIVE LEARNING GROUPS

In order to maximise their achievement when studying, students should be given time to get involved with active learning. One way of getting students more actively involved in co-operative learning is to structure co-operative learning interaction into small groups so that students will be able to explain what they learn from one another, give one another support and help each other dig below the surface understanding of co-operative learning.

Co-operative learning may be divided into three categories which are:

- (1) **informal** co-operative learning groups, which are short-term and less structured;
- (2) **formal** co-operative learning groups, which are structured and students usually stay together until the task is completed; and
- (3) co-operative **base** groups which are long-term groups whose fundamental tasks are those of peer support and long-term commitment and accountability.

The three types of co-operative learning will be discussed.

### 2.7.1 Informal co-operative learning groups

Informal co-operative learning groups as argued by Johnson *et al.* [1991(a):5] are temporary, ad hoc groups and usually last for one period only. They are meant to focus on the students' learning material, organise the material to be learnt during a class period and ascertain that students process the material that is taught. The "understanding" to which Johnson *et al.* [1991(a):10] refer means understanding of the material that is prepared to be discussed and presented afterwards. The advantage of informal co-operative learning groups is that they can be used at anytime. Since they can be used at anytime, they last for about twelve to fifteen

minutes during which time students can break from a lecture and get engaged in co-operative learning. When lectures are broken up with short co-operative processing times they prohibit the lecturer time to conduct a lecturer-centred teaching and learning. Instead, students start owning the subject matter, for they start discussing among themselves and while discussing relationship is strengthened among themselves.

### **2.7.2 Formal co-operative learning groups**

Formal co-operative learning groups are structured small groups whose intention it is to do and complete a specific task or an assignment. Students are made to work together in order to achieve the shared goals. Each student has two specific duties in formal co-operative learning namely; to maximise his/her learning and to maximise the learning of all members of a group. The facilitator may make clear instructions to say how work should be done, to assign students to learning groups, to give learning material needed, explain how students should do the task in co-operative learning groups, to facilitate students' learning and the facilitator can evaluate students performance when they do presentation through their presenter. Johnson *et al.* [1991(d):10] point out that it is the instructor who structures the learning groups, decide on the size of groups and teaches students to master and apply strategies and guides learning groups' processing of their effectiveness.

### **2.7.3 Base groups**

Base groups are long-term, heterogeneous co-operative learning groups whose composition is that of stable membership. The fundamental responsibility of forming base groups is to make each student cultivate the habit of supporting other students and students to be able to encourage one another in co-operative learning activities.



When students have become part of base groups they are expected to stay together in the same groups for the entire course. Once they stay together for a long time they will be able to exchange personal particulars like telephone numbers in order to make appointments to meet to discuss learning material. As a result of having other group members information, students can decide to meet anytime including after college lectures.

For the purposes of this study a summary of the academic functions of group members in base groups can be summarized as follows:

- give assistance, support and encouragement for mastering learning material during and after the task has been given;
- encourage other group members to learn to think critically when they discuss course content;
- provide interpersonal relationships among group members; and
- ensure that all members become successful in participating in co-operative learning.

The long-term groups are the foundation on which co-operative learning is based, that some are meant to relieve students from a lecturer-based learning and teaching like informal co-operative learning and teaching but their fundamental aim is common. It is to foster the internalisation of the concept of co-operative learning, especially in higher education. Common to them all is the role of the facilitator whose role remains the same on all the three types of co-operative learning.

## **2.8 CO-OPERATIVE LEARNING TECHNIQUES**

In a football match no player plays independently without relying on his team members. A ball has to be passed from one player to the other until it reaches the front-line players. It is the front-line players who usually score goals and the winning goal. It would be untrue and unfair to say the front-liners are the ones who score the winning goal. In actual fact they complete a job which was started by the back line. Players pass the ball from one player to the other. Passing the ball should not be looked at as a simple job. It needs a special skill - a skill that entails thorough practice, knowledge of the rules of the football game and willingness for a player to share the game with his team members. The football team becomes successful because they and the coach have worked together. The coach outlines the strategies the team should use in order to defeat opponents. Players then put into practice all the theories they and the coach discussed. Should the strategies outlined by the coach make the team win, the team has succeeded in their co-operative discussions. Should their strategies fail them, then they need to go back to the drawing board in order to rectify possible flaws that led to their failure.

Just as the football team uses strategies in order to score winning goals, in order for a lecturer to succeed in persuading his/her students to like and participate in co-operative learning activities, he/she needs to be tactful in his/her selection of co-operative learning strategies some of which will be discussed briefly. While there is understanding that there are many co-operative learning strategies, for the purposes of this study only seven co-operative learning strategies will be discussed.

### **2.8.1 Dyad or the learning cell**

McKeachie (1994:146) and Christison (1990:7) use the term dyad' when they refer to activities that students engage in one-to-one with others in class. Students who are engaged in this activity work in pairs mainly to share ideas - or when there is an



information gap. Before the actual co-operative learning activity takes place, participants should prepare themselves thoroughly by preparing given material, constant rehearsal of prepared material and conditioning themselves. Also students reading an assignment with the view to asking questions may use this activity. Students could use charts with information gaps and this then becomes the task of each student to imagine strategies for getting information, (Christison 1990:8). As McKeachie (1994:146) recommends that, "students could each read an assignment and after they have finished they start asking each other questions on commonly read materials". Questioning could be done alternately until all group members have had a chance to do so. When all the above-named activities have taken place, the facilitator goes from dyad to dyad in order to give students feedback, to ask and answer questions (McKeachie, 1994:147). According to McKeachie (1994:146) one student can read an assignment and others can formulate questions meanwhile. Questions arise from what students consider important points which are worth questioning from the reading by one member of the group. After reading has been finished, student A can start raising questions. When the first question has been dealt with in the form of answering, or some corrections have been made, student B starts asking his/her questions.

## **2.8.2 Student-led discussions**

Student-led discussion groups are semi-autonomous groups, that is, the facilitator remains on the background and may not instruct students to do what s/he wants them to do. S/he facilitates students' learning. These groups are then semi-autonomous because students do not depend entirely on a lecturer. McKeachie (1994:145) contends that student-led discussion groups tend to be superior in dealing with complex problems when compared with the lectured students who were good at regurgitating facts. To further strengthen his argument McKeachie (1994:145) reiterates the point that student-led discussion groups are superior in curiosity, interest and motivation. Slower students usually benefit from student-led



discussion, (McKeachie, 1994:145). Before students can embark on who should lead them in a discussion, they must have mastered all learnt material and must have rehearsed the reading exercise thoroughly so that whoever takes the lead does so with confidence.

### **2.8.3 Syndicate-based peer learning**

McKeachie (1994:148) argues that the term 'syndicate' has a faintly evil connotation in the United States. In other countries like Britain, the term means a "team-based" system of learning. This means the class is divided into teams of four to eight students or syndicates and given some assignments. Teams or syndicates work on the given assignments. Most of the work is done co-operatively by teams or syndicates. Once students have become satisfied with the task of discussing given material then they will present their work through their presenter. The presenter presents the ideas of the syndicate and all members of the syndicate look up to him/her as the group representative. When students presented their work as syndicate representatives there were signs of increased motivation as stated by McKeachie (1994:148).

McKeachie (1994:148) argues that a syndicate-based peer learning strategy is another technique used in promoting co-operative learning. The theme of this discussion centres around co-operative group discussions, where students put their heads together with the view to coming up with one piece of work which is presented by one person. The presenter cannot deviate from what all group members have "sent" him/her to do. S/he does just that what was co-operatively agreed upon. This is one way which promotes co-operative learning.



### **2.8.4 One-centred activity**

In this strategy co-operative learning activities put one student in the "spot-light" for a few minutes, (Christison, 1990:7). This activity sharpens the participant's self confidence as he/she becomes a focal point when responding to questions asked by members of the group. A good example of this activity is for all students to each prepare a question to ask and answer. Each day several students are "spot-lighted" (Christison, 1990:7). Whilst the student is spotlighted, other students ask him/her questions. Once students get used to this exercise they won't be affected by stage fright. This is another good example of co-operative learning by college students. Students ask questions freely from groups and the spotlighted student responds. All students become involved because each one of them has had an opportunity to go and study learning material, they are all given an opportunity to participate by asking questions. They also prepare to respond to other student participants when they too have been "spotlighted". All these activities where students are part of doing, help one another to succeed, make efforts in order to see others respond to their questions (with the view to testing their readership) can be summarily termed co-operative learning.

### **2.8.5 Unified groups**

"Unified groups are co-operative learning activities which promote co-operation in the group" (Christison, 1990:7). Students work together as partners in co-operative learning and form a group that will take part in co-operative learning. If one member of the group decides not to participate that group loses credit or cannot be successful. A unified group requires the participation of each member of the group. Christison (1990:7) suggests a "strip story" where groups can "put lines of a story pack together". "The text of a story is cut into strips with several lines of the story on each strip".(Christison, 1990: 7). Students work together in groups to try and put the story together. Students do not show their story strips to group members while they



put it together. This is done in order to promote talking and discussion when groups make their presentation. The information that is exchanged during the unified groups is done orally (Christison, 1990: 7) to allow students to speak.

### **2.8.6 Peer learning and teaching in large classes**

When McKeachie (1994:144) re-iterates the maxim “the most effective method of teaching is students teaching other students”, he means students can be experts of the subject matter if they have been shown how to go about participating with understanding and meaningfully in co-operative learning, given guidance how co-operative learning activities can help improve their oral competence in English and be monitored in all co-operative learning activities. Students listen carefully when another student handles the subject matter, for they ask questions freely, they easily see if he/she has read sufficiently and if the student demonstrates that he/she has read sufficiently other students may decide to go and read even more. If he/she shows signs that he/she has not read sufficiently only then can other students intervene in order to assist. A large college class divided into small groups makes the work of the facilitator much easier because all students get engaged in co-operative learning activities. Co-operative learning (in groups) means students participate actively by asking questions, answering questions, and by discussing. Christison (1990:6) prefers to refer to large classes as large groups but does not specify how a large group should function. Both McKeachie (1994:205) and Christison (1990:6) seem to agree that to make the job of the facilitator a bit easy large groups should be divided into small and manageable groups.

### **2.8.7 Student teams-achievement divisions (STAD)**

This is one of the co-operative learning strategies where students help each other in order to succeed. Students who are involved in co-operative learning help each



other to master the skills of the lesson that has been presented by the teacher. The main objective of STAD is to motivate students. to encourage one another as individuals and as groups in order that they get incentives in the form of a group certificate or any form of award.

In STAD, students are assigned to mixed four-member learning groups. They can be mixed in terms of gender or ethnic background. After the teacher has presented a lesson student participants work within their groups to ascertain if all members of the group have mastered the taught lesson. Students use quiz scores that are compared to their own past averages. Students then receive points for their performance and get more points if their scores exceed their previous averages. Once students have completed the given task points are then added to form scores. Those groups that meet certain set criteria may be awarded certificates or other kinds of awards.

These activities may take five periods. Slavin (1995:20) argues that STAD has been successfully used in various subjects like languages, mathematics and social studies.

## 2.9 CONCLUSION

Mention should be made that researchers like Johnson *et al.* [1991(a):1-6], Johnson *et al.* [1991(b):11] and Bartlett (1995:133) seem to agree that colleges of education have got to embark on co-operative learning programmes to prepare their students for the corporate world because students “live in a world characterised by interdependence”.

Active learning programmes conducted in college classrooms should mirror what is practically going on in the society. This means that college lecturers should expose students more to co-operative learning activities so that college students are

able to apply them when they qualify as teachers. Teaching should re-focus attention “on teaching for active, and co-operative learning strategies and teachers are becoming facilitators of learning” (Kapp, 1994:6).

Co-operative learning skills should be learnt at college level and college students should be persuaded to learn these skills so that they (college students) can apply them when they qualify as teachers. As prospective primary school teachers there is a strong possibility that if they have internalised co-operative learning strategies, problems of teacher/lecturer-centred learning will gradually be minimised.

Unless college lecturers change their approach to teaching and learning, college students are unlikely not to abandon the traditional way of teaching. The change from traditional ways of teaching and learning by college lecturers into co-operative learning may yield positive results and influence on college students.

This chapter dealt with an overview of some operational aspects of co-operative learning with a focus on appropriate literature review. It developed to include the rationale on why co-operative learning should be studied and applied practically. The chapter continued on to discuss elements of co-operative learning, learning outcomes promoted by co-operative learning, possible problems that can be encountered with the use of co-operative learning, possible ways to encourage students to be part of co-operative learning, types of co-operative learning groups, co-operative learning strategies and ended with the conclusion.

The next chapter focuses on research design and research methodology.



## CHAPTER 3

# RESEARCH DESIGN AND RESEARCH METHODOLOGY

### 3.1 AN OVERVIEW

The literature review in chapter two served as the framework for the empirical study to be thoroughly examined. In chapter one the research problems spell it out clearly that Madadeni College students fail to express themselves succinctly in English.

The research makes an endeavour to involve a sample of Madadeni College of Education Senior Primary Teachers' Diploma students in a scientific survey of co-operative learning. Most students have never had an opportunity to get involved or participate in co-operative learning activities. All participating students will be involved in an oral test that will be answered by all individually, that is; at this stage none of them is given assistance by the lecturer.

A review of the appropriate literature on co-operative learning under the topic; **learning outcomes promoted by co-operative learning** led to the discovery of some of the following:

- students who get involved in co-operative learning activities improve their self-esteem;
- students involved in co-operative learning showed improved academic achievement;
- if college lecturers can engage students in learning activities such as co-

operative learning activities, students can develop higher reasoning strategies; and

- students tend to be good at articulating ideas.

A research design had to be constructed with the above-mentioned statements in mind because they have been scientifically researched.

## **3.2 RESEARCH DESIGN**

In chapter one of this research (par 1.6) the research methodology outlines the activities that will form part of the research. The research methodology commences with activity one through activity four. It is in these four activities where participants were practically involved in co-operative learning activities. From these co-operative learning activities the researcher was able to construct the questionnaire (see appendix C) which forms the cornerstone of this research, for the questionnaire sought responses (from participants) which would help inform the research.

The research was planned to cover a period of two years, starting from January 1997. It was developmental in nature and it involved both qualitative and quantitative techniques as means to gather data.

### **3.2.1 Population and sample**

The total group of sixty third-year Senior Primary student teachers from Madadeni College of Education participated in this research. All sixty participating students studied English as a second language as all of them come from a non-English speaking background. Most students originate from the province of KwaZulu-Natal. The research involved them in English Didactics which is a methodology of teaching English. These students were randomly selected from a large group of



approximately six hundred third year Senior Primary Teachers' Diploma students. All sixty students were to be part of the study for the whole period of experimentation. The actual participation of students in co-operative learning activities covered a period of three weeks starting from 19 August 1998 to 17 September 1998.

### **3.3 RESEARCH PROCEDURES**

#### **3.3.1 Introduction**

Sixty third-year senior primary student teachers participated in co-operative learning in the micro-teaching and learning classroom. These sixty student teachers became part of practical activities throughout the three weeks. After all co-operative practical activities had been finished student participants were given a questionnaire to respond to. Their responses to the questionnaire would help the researcher to be able to collect and code data from them. The questionnaire was used as an instrument that would measure students' performance in co-operative learning activities, perception of co-operative learning and to look for areas where improvement is needed. Above all the aforementioned reasons the researcher would assess students engagement in oral English.

The research included the following: pre-co-operative, co-operative and post co-operative learning activities which had to be done so that the researcher would study students behavioural responses to all three of them. It was essential that students got actively involved in all three activities so that when the final co-operative learning activity was done, the facilitator would be able to notice whether they had shown improvement or would improve with more involvement in it.

### 3.3.2 Research programme

A co-operative teaching and learning lesson that focussed on base groups, student-led discussions and formal co-operative learning groups was used for English Didactics 111 of the senior primary school. After students had received training on how to go about participating in co-operative learning, they were divided into twelve groups of five each and given English Didactics topics to discuss in their separate groups. These topics included the following; **Error correction in foreign language teaching** (Hendrickson, 1978), and **Learner errors and error analysis** (Ellis, 1994) (see appendix B). The English Didactics books that were used are commonly used when an English methodology lesson is conducted.

Before co-operative learning activities commenced, students were given training on the responsibilities of each member of the group. Training entailed clarification of roles that each member of the group would play. The facilitator assigned students to groups before the actual start of co-operative learning. After each topic had been completed, the facilitator would then make students to join another group. Since most practical co-operative learning activities demanded more time, it became necessary to extend teaching and learning time of co-operative learning to the afternoons.

### 3.3.3 Practical co-operative procedures

Since College learning and teaching time takes fifty-five minutes per period, the researcher decided to work within this time. However, students were asked in advance that they could exceed the College prescribed times.

All sixty participating students were given learning material to prepare for co-operative learning group discussions. Learning material comprised the following topic which had sub-topics : The main topic of the first lesson was taken from the



methodology book by Lewis and Hill (1993:16) (See Appendix B). The topic of the subject was **"Language in the classroom"** and the sub-topic was; "Some language you could teach". All participating students were given photocopied material from this topic to study and get prepared to give oral answers individually.

They were told that after twenty minutes they would each have to respond orally to questions that the researcher would ask them. Each student answered the questions individually. The author told the class that students' efforts would be rewarded individually and that the rewards would count in their year mark. This exercise of teaching and learning took one-and-a-half periods. The scores of the first oral test of all participating students were recorded and calculated so that they would be compared with their final results in active co-operative learning (See Appendix A). After oral test results were made known some students were not happy with their scores probably because they attributed their unconvincing results to their failure to respond well or they thought they needed another chance to re-study the material. However, students who were unhappy with the results were encouraged that they would be given more time to participate in another activity before the end of other sessions which were to follow. The researcher kept records of all students' scores so that he could compare them with the scores where they worked co-operatively.

### **3.3.4 Co-operative learning activities**

The foregoing topic only demanded students to read given learning material individually and afterwards they had to respond to questions individually. In other words the researcher wanted students to do work on an individual basis so that marks that each student would get reflect an individual effort.

The following discussion dealt with the actual co-operative learning activities wherein participating students were involved.



The programme of co-operative learning started on 19 August 1998 to 17 September 1998. This period gave student participants twenty-two days on which to be involved in practical co-operative learning activities. All co-operative learning activities had used topics from English Didactics books that have already been mentioned.

Before the actual start of an introductory session to what co-operative learning is all about, student participants were told by the researcher that they were being introduced to something that could help them to be better and effective teachers before and after they had completed the course. The researcher further explained what co-operative learning is and what it means, why co-operative learning is done and what each student participant was expected to do. The researcher then divided all sixty participating students into twelve groups of five each. The instructions given to students were the following:

- each group would receive an envelope with an equal amount of paper pieces of different shapes;
- all groups were expected to "build" a church tower using all supplied material. If students had surplus material that would mean there is something wrong with the "construction" of the church tower or if there was a shortage there would be something wrong with the "construction" again. The specimen of a church tower was mounted on the chalkboard for all groups to see;
- groups were expected to complete the job in ten minutes;
- creativity was important in building the tower; and
- the group with the most attractive tower would get a good reward.

After groups had been told to start, there was a noise, though controlled. Going



around and listening to all groups, the researcher heard such "shouts" "no, not that one", "is this one correct" "hurry up". From the audible "shout" the researcher was able to deduce that some work was being done. The aim of the church tower construction was to introduce students to real co-operative learning. For the purposes of this study only three examples of what transpired between the students and the researcher after students had finished their task have been used. After students had completed the task of tower construction, they sat together with the researcher for another ten minutes to discuss the following:

- why they could not work as individuals;
- at some stage they felt they needed the help of others; and
- if ideas that were given to the person who was to do the actual building were acceptable to others.

The foregoing questions were asked mainly to ascertain if students realised that they would need one another to succeed or that ideas from other people may be helpful.

### **3.3.5 Participation in co-operative learning activities**

The learning material which groups were given was a Didactics topic taken from Hendrickson (1978). The title of the topic is *Error correction in foreign language teaching: recent theory, research and practice* which has five sub-topics whose headings were as follows:

- Should learner errors be corrected?
- When should learner errors be corrected?
- Which learner errors should be corrected?
- How should learner errors be corrected?

- Who should correct learner errors?

There were two other sub-topics that were added to the above-mentioned ones namely;

- learner errors and error analysis and
- description of errors.

These two additional topics were taken from Ellis (1994:47-57).

After roles to be performed by each participant in the group had been clearly explained, participants sat in their respective groups and started reading and afterwards discussing the given learning material. At times student participants would call the researcher to want to know how they would present their learnt material or if the presenter was to write down sentences in full or use key words. While all co-operative learning activities were going on the researcher moved around mainly to monitor what is going on in the activities the same way as Lombard and Koen (1999:6) did when they conducted critical thinking activities. The moving about of the facilitator, listening to students' discussions and giving help when invited to do so is known as facilitation.

The two plenary sessions will now be discussed.

### **3.3.6 Plenary sessions (25 to 27 August 1998 and 15 to 17 September 1998)**

For the purposes of this study the two plenary sessions, where all 60 students is involved, will be presented under the same heading as differences between them were not substantial.

The two plenary sessions which were conducted in the College micro-teaching room



were presented on 25-27 August 1998 and 15-17 September 1998 went as follows:

Since the aim of this research was to ascertain whether students' oral English participation in co-operative learning could have an effect on their oral performance, the researcher decided to divide the plenary sessions into two. The first plenary demanded students to present the given and learnt material on Hendrickson's "Error correction" After the presentation of the first plenary there were discussions held between students and the researcher pertaining to co-operative learning.

Discussions centred around the following questions and statements:

1. Did you all participate in co-operative learning group discussions?
2. What do you think could have made your group to present even better in future?
3. Roles. Were all roles sufficiently performed?
4. Suggest a few things you believe could be done to help all group members improve their participation in co-operative learning activities.

These are some of the questions that were raised and discussed. After the first plenary students went back to co-operative learning activities. The accent on the second involvement was to make students reflect on their performance in the first attempt in the co-operative learning activities. The second training of students in co-operative learning took another two weeks. Before the final dates of the second and final plenary arrived, students and the researcher mutually agreed that they would get better rewards (in the form of good marks towards their final examination) if they did their best.

The second topic of the second plenary was drawn from the study guide entitled; *Language in learning and teaching* (Macdonald and Thomson, undated). The topic of the discussion was "The curriculum" where students were to study and interpret two pictures. The instruction given to groups was; "Look at the pictures below and for each one decide what you the learners are learning apart from the subject content." Students were then expected to present this learning material through their presenters. Students were then awarded marks after they had completed their



presentation.

An atmosphere of willingness to work and participate in activities and a positive spirit dominated both plenary sessions.

### **3.3.7 Post co-operative learning activities**

After the two plenary sessions had been completed, it became necessary for both the student participants and the researcher to sit down and discuss what they had set out to achieve. A reflection on the co-operative learning activities was to be done. For the purposes of this research only two things will be mentioned. In holding discussions with the student participants it became clear that all students prefer the way in which they participated in co-operative learning activities and showed interest by asking for more inclusion of co-operative learning activities in their English lessons.

While discussions were going on students looked relaxed and more willing to participate. To conclude this session the researcher awarded all groups with good marks that appear in Appendix A. By good marks it is meant that the student participant receives an award that matches the degree of work he/she has done.

## **3.4 SOME OBSERVATIONS MADE DURING CO-OPERATIVE LEARNING**

While doing some facilitative work during co-operative learning activities the researcher noted a few things. These points came from what the researcher observed.

When the researcher got students to participate in their co-operative learning



groups he observed the following behavioural activities:

- students showed willingness to help their presenter during the presentation time;
- each time another group made a presentation the following group would put their heads together to either re-look at some of their points or re-word them in case other groups mentioned something common to them all;
- there was more openness with other group members;
- normally quiet students were beginning to "open up" ;
- co-operative-related terms like encourager, presenter, recorder and researcher were used frequently;
- English grammatical mistakes were prevalent with the less open students probably because they still needed more time to get involved with practical activities which involve more talking;
- students showed increased inclination to participate as they approached the third week of their participation in co-operative learning activities;
- During the third week of the students' involvement in co-operative learning the researcher had not experienced serious difficulty explaining the procedures of preparation of the learning material up to the presentation of the learning material. Students decided to do it themselves in their own respective groups;
- students' scores showed improvement from those of the pre-co-operative learning (See Appendix A ); and

- there was a "healthy hum" in the micro-teaching classroom. A healthy hum is that subdued murmur during co-operative learning discussion.

### **3.5 THE DESIGN OF THE QUESTIONNAIRE**

The questionnaire that appears on appendix C was constructed and was based on activities which took place in chapter three. Before the actual commencement of the research, the researcher talked to the would-be participants about the questionable standard of English at Madadeni College. There was a general consensus between students and the researcher that something had to be initiated and done by both the lecturers (the researcher included) and students to improve the standard of English at Madadeni College of Education. This endeavour formed part of the questionnaire piloting. The questionnaire piloting was done qualitatively. As there are no ready-made questionnaires that are meant for this research, the researcher became directly responsible for the design and construction of the questionnaire. There were sixty student participants who, after they had completed the three weeks training in co-operative learning, had to respond to the questionnaire.

The main purpose of the questionnaire was on student participation in co-operative learning activities and their oral competence in English.

Students had each been given a questionnaire that had a covering letter explaining the purpose of the research. The questionnaire had a total of twenty questions which required participants to respond to in approximately one and a-half-hours. The work and the home telephone numbers of the researcher appeared at the bottom of the cover page. This had been included to accommodate students who might want to know more about co-operative learning.

Respondents had been requested to put an **X** in the applicable block. Respondents were told, as part of the instructions that the questionnaire did not have correct or



wrong answers. In addition to questions that focused on co-operative learning, the researcher had included biographical information that included age, gender and class. Age in particular was an important factor, for many participants had passed standard ten and had been out of school for a few years. Gender had been included because it is traditional to identify gender distribution in the sample.

In case questions did not address the expectations of the respondents, they were requested to write their suggestions or opinion. These questions appear under the sub-heading "Other (please specify)".

### **3.6 METHOD OF ANALYSIS OF THE COMPLETED QUESTIONNAIRE**

After all respondents had completed and submitted the questionnaire to the researcher, the data was coded, processed by the computer and analysed by using the Statistical Analysing System (SAS) at the University of Stellenbosch. The purpose of the research as is expressed in par 1.4 in Chapter1 was to ascertain the effectiveness of oral co-operative learning in English, to examine and diagnose the practical use of co-operative learning involving Madadeni College students, encourage the use of co-operative learning, challenge conventional classroom arrangement and contribute to the limited literature on co-operative learning in South Africa.

### **3.7 CONCLUSION**

This chapter focused on an overview of the research design and research methodology, and continued on to include research procedures. The chapter developed to include some observations made by the researcher during co-operative learning, the design of the questionnaire, method of analysis and ended

with the conclusion.

Chapter 4 focuses on the presentation, analysis and concludes with the interpretation of the results.



## CHAPTER 4

# PRESENTATION, ANALYSIS AND INTERPRETATION OF THE RESULTS

### 4.1 INTRODUCTION

In Chapter 1 of this thesis the purpose of the research was explained. It was to examine and diagnose how co-operative learning can be used to help students improve their oral English at Madadeni College of Education. The fundamental point was to make students to be part of oral English through the use of co-operative learning.

The involvement of students served as demonstration that co-operative learning is a viable option to be used in order to reach successful oral English learning. There were sixty students who were involved in practical co-operative learning activities. After students had completed the training and participated in co-operative learning, they were each given a questionnaire to respond to. The questionnaire consisted of twenty questions that had the following sub-headings:

- biographical information;
- personal feelings on getting involved in co-operative learning;
- co-operative learning in English as a Second Language; and
- post co-operative learning activities.

## 4.2 PRESENTATION, ANALYSIS AND INTERPRETATION OF THE RESULTS

After the results were presented, they were analysed and thereafter interpreted. The interpretation of the results had to be linked to the appropriate literature that had been read and studied. The appropriate literature that had been read embraced the whole of Chapter 2. The next paragraphs focus on presentation of the results after which the analysis and interpretation will follow.

### 4.2.1 Gender

Gender in any questionnaire could be seen as the main difference between individuals. Gender has been included because it is traditional to identify gender distribution in the sample as a basic variable for differences. The findings from this question are provided in Table 4.1.

**TABLE 4.1**  
**GENDER**

	<b>N</b>	<b>%</b>
Male	10	16,7
Female	50	83,3
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.1, the majority (83,3%) of the target group was females while 16,7% consisted of male participants.



### 4.2.2 Age groups

In any work situation people who are young are believed to be likely to remain in the job for a long time. As civil servants young educators will get attracted to the government benefits like housing loans after they will have served for three years. This is another benefit that can make them stay longer in the teaching profession.

When these educators spend most of their time in the teaching profession from this young age, one could expect that they would have made a remarkable contribution in teaching co-operative learning to learners. The findings from this question are reported in Table 4.2.

**TABLE 4.2**  
**AGE GROUPS**

	<b>N</b>	<b>%</b>
19 to 24 years	3	5,0
25 to 30 years	15	43,3
31 to 36 years	30	50,0
No response	1	1,7
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.2 the respondents whose ages range between 19 and 30 years constitute 48,3%. As government servants these respondents are likely to stay in the teaching profession for an average period of 29 years if they retire at the age of 60. The respondents whose ages range between 31 and 36 years of age make 50%. These respondents will have taught for an average of 22 years by the time they retire. Since they will join the teaching profession at a mature age they are likely to make a difference in schools by introducing co-operative learning not only to learners alone but also to educators who are already in the teaching profession.

### 4.2.3 Personal feelings about performance in the first test

It was essential for the researcher to know the target group's reaction to the individually done oral test. The researcher expected the results of the first test to vary. Only a few students were expected to get high marks and therefore be rated above average. The majority of the students were expected to get below average. This is a normal trend where there is competition. In Chapter 2 of this research Johnson *et al.* (1991 (c): 51) report that individually done material does not lead to excellence because it involves competition. The oral participation of the respondents is fully reported in Chapter 3. Some of them attained high rewards that is, marks which were above average. The findings from this question are presented in Table 4.3.

**TABLE 4.3**  
**PERSONAL FEELINGS ABOUT PERFORMANCE IN THE FIRST TEST**

	N	%
Very excited	26	43,3
Excited	27	45,0
Mixed feelings	7	11,7
Bad	0	0,0
Very bad	0	0,0
Don't know	0	0,0
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.3, the majority (88,3%) of the target group was excited to very excited about their performance after results of the first test. This meant participants were satisfied mainly to pass a test and not about excellent performance. This confirms that students were merely satisfied with a pass mark. They probably did not realise that if they had worked harder they could have got better reward. Although this looks like a small percentage, it does affect this



research negatively because if they had said something positive their responses could have had positive effect on this research. Those participants who had mixed feelings formed only 11,7% making them ineffective.

#### 4.2.4 Score in the individual test before participating in co-operative learning

To be able to interpret the results of the survey, it was essential for the researcher to know the scores of the first test that they got. These scores would help the researcher to be able to compare the results where students would work in small manageable co-operative groups and those where they had to respond to a test as individuals. As is reported in Chapter 2 by Christison (1990:6) (see par 2.6) that when students work on an individual basis they tend to compete, and this is one of the aims the researcher wants to establish. The response to this question is provided in Table 4.4

**TABLE 4.4**  
**SCORE IN INDIVIDUAL TEST BEFORE PARTICIPATING**  
**IN CO-OPERATIVE LEARNING**

	<b>N</b>	<b>%</b>
Above average	11	18,3
Average	46	76,7
Below average	3	5,0
Not sure	0	0,0
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.4, the majority (95,0%) of the group agreed that their results were average to above average (95,0%). That meant that probably these participants' scores could improve dramatically if they were to be given an

opportunity to participate in co-operative learning activities.

#### 4.2.5 Comparison of co-operative learning results with individual test

It was essential to know the target group's responses to the results of co-operative learning and those of individual attempt. When sitting down with students the researcher made students to look at both results of co-operative learning and individual test. The researcher constantly asked questions that made students to realise that where there is co-operative learning there is the likelihood for participants to improve their work because they would get encouragement and assistance from their fellow group members. Their results were treated collectively as against the competitive results in the first test where they were expected to answer on an individual basis.

The results of this question are reported in Table 4.5

**TABLE 4.5**  
**COMPARISON OF CO-OPERATIVE LEARNING**  
**RESULTS WITH INDIVIDUAL TEST**

	<b>N</b>	<b>%</b>
Have improved	36	60,0
Have improved slightly	10	16,7
All students get fair scores	11	18,3
No difference	3	5,0
No one competes	0	0,0
Not certain	0	0,0
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>



As can be seen in Table 4.5 the majority (76,7%) of the participants agreed that they had slightly improved to improved when comparing co-operative learning results with those of an individual test. This confirmed research studies that are reported in Chapter 2 by Christison (1990:9), McKeachie (1994:145), Johnson *et al.* [1991(a):2-12], Johnson *et al.* [1981(c):51] and Nattiv *et al.* (1991:218) (see par. 2.4.2) that once students get involved in co-operative learning activities, they show improved academic achievement. This would also correspond with Johnson *et al.* [1981(c):50], Nattiv *et al.* (1991:218) and McKeachie (1994:145) as their arguments are reported in Chapter 2 that “co-operative learning promotes higher achievement than does competition”. 18% of the participants were happy that everybody got fair results.

#### **4.2.6 Co-operative learning as alternative learning approach in Higher Education**

This question was asked in order to test participants' understanding of the need for co-operative learning to be used in higher education. The researcher wanted participants to realise that higher education does not require students to read in order to regurgitate facts but to be able to reach a consensus after there has been some arguments in discussions. Participants had to be introduced to something that would demand of them to work effectively in small co-operative groups so that they cultivate the habit of owning their work as is reported in Chapter 2 by Bartlett (1995: 139) and Christison (1990:9) (see par. 2.4.6). By learning to work together in small manageable co-operative groups, students would lessen lecturers' work by doing most of the work independently and only call the assistance of the lecturer when they need some clarification. The response to this question is provided in Table 4.6

**TABLE 4.6**  
**CO-OPERATIVE LEARNING AS AN ALTERNATIVE**  
**APPROACH IN HIGHER EDUCATION**

	N	%
Strongly agree	16	26,7
Agree	32	53,3
Neutral	5	8,3
Disagree	5	8,3
Strongly disagree	1	1,7
No response	1	1,7
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.6, the majority (80%) of the participants agreed to strongly agree that co-operative learning could be used as an alternative approach in higher education. The positive indicator by student participants showed that students had made an observation as participants in co-operative learning activities. The researcher also needs to report that participants casually used terms like “encourager”, “recorder” after they had been part of co-operative learning activities. Those who decided to be neutral (8,3%) and to disagree remained a minority and probably they needed to be motivated in order to see the need for a change in teaching and learning in higher education. Those participants who decided to disagree (8,3%) with the idea that co-operative learning be part of higher education formed a small percentage. Those who strongly disagreed and those who did not respond formed 1,17% respectively. The last two mentioned responses did not have an effective influence on the results of the findings of this research.

#### **4.2.7 Lecturer-centred learning**

This question sought to know how the researcher, including the lecturers in the English Department, lectured during their teaching and learning periods. The



responses to this question would be based on participants' observations. Since all respondents to this questionnaire had had an opportunity to participate practically in co-operative learning, they were expected to state the difference between them sitting and listening to a lecturer lecturing them and a state where they were made to get involved in small co-operative learning activities. The participants' responses would help the researcher to know and possibly think of more research to be done on teaching and learning in Higher Education. Another reason was that the researcher wanted to make participants aware that co-operative learning suggests a departure from conventional instruction as the argument by Nattiv *et al.* (1991:217) is reported in Chapter 2 (see par. 2.7). The response to this question is provided in Table 4.7.

**TABLE 4.7**  
**LECTURER-CENTRED LEARNING**

	N	%
Strongly agree	1	1,7
Agree	20	33,3
Neutral	7	11,7
Disagree	24	40,0
Strongly disagree	7	11,7
No response	1	1,7
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.7, 35,0% of the participants **agreed to strongly agree** that some English lecturers (including the researcher) had conducted lectures that were lecturer-centred. 51,7% of the participants **disagreed to strongly disagree** that the English lecturers (including the researcher) had conducted lectures that were lecturer-centred. However it is pleasing to notice that slightly above 50% of the respondents did recognize that the English lecturers (including the researcher) did not dominate the lectures. 11,7% of the participants decided to be neutral probably out of confusion or because they were not as observant as the rest of the

respondents.

#### 4.2.8 Role played by the researcher while participating in co-operative learning activities

It was essential for the researcher to determine whether the participants were aware of the role the researcher played during the practical co-operative learning activities. This would contribute to the research findings, as the researcher would determine whether there needed to be more research done on this particular role and other roles in co-operative learning.

The response to this question is reported in Table 4.8

**TABLE 4.8**  
**ROLE PLAYED BY THE RESEARCHER WHILE**  
**PARTICIPATING IN CO-OPERATIVE LEARNING ACTIVITIES**

	N	%
Supervisor	19	31,7
Manager	2	3,3
Agitator	4	6,7
Facilitator	34	56,7
No response	1	1,7
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.8, 56,7 % of the participants did recognize the role that was played by the researcher, although this was not a high percentage. 31,7% misinterpreted the facilitator for a supervisor. This could have arisen out of confusion as to the difference between the facilitator and supervisor. These responses indicated that there was probably not enough time given to these



participants so that they could grasp the difference between the two roles. There were those participants who said the facilitator was either a manager (3,3%) or an agitator (6,7%). These responses indicated that there needed to be more time given to some participants so that they would fully understand the role the lecturer assumed in co-operative learning activities.

#### 4.2.9 Role each participant played in co-operative learning

To be able to know the role each participant played in co-operative learning activities, the researcher had to ask this question. The aim was to know the role each participant had chosen so that in the end he would ask the specific functions of a role they had each chosen. Participants (during discussions with the researcher) were expected to state reasons why they had chosen a particular role. In Chapter 2 of this research, the researcher reported arguments by Johnson *et al.* [1991(a):1-19] and Bartlett (1995:132) where they say that each participant should know the specific role s/he is expected to perform. The response to this question is reported in Table 4.9.

**TABLE 4.9**  
**ROLE EACH PARTICIPANT PLAYED IN CO-OPERATIVE LEARNING**

	N	%
Researcher	19	31,7
Encourager	10	16,7
Recorder	3	5,0
Presenter	27	45,0
No response	1	1,7
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.9, the most popular roles participants chose were those

of the presenter, researcher and encourager which constituted 92,4%. The recorder got the least responses. The former three roles are major because; a presenter is expected to have exceptional skills to summarize all important points discussed in a group and be able to present them well. Of the three major roles, the second most important was researcher which constituted 31%. A researcher's task is that he/she should possess outstanding qualities like to cultivate the habit of reading voraciously, to be crisp when organising and presenting what he/she has read during co-operative learning activities. An encourager's task is that he/she should see to it that everybody attends group discussions, actively participates in group discussions and encourages everybody to read. These findings correspond favourably with Bartlett (1995:132) whose findings are reported in Chapter 2 where he argues that students who perform certain roles should possess some outstanding characteristics. However, the researcher needs to mention that there was not enough time to test participants if they had all the qualities that are expected of them in the roles they chose including the most popular roles.

#### **4.2.10 Improved oral command of English**

This question was asked mainly to find out from the group of participants if they had noticed improvement in their articulation of English. The researcher also wanted to know if participants perceived themselves to have gathered confidence through co-operative learning. In Chapter 2 of this research the researcher reported arguments made by Christison (1990:9) where she conducted 27 studies in co-operative learning and discovered that participants showed academic improvement. The oral command of English is coupled with good articulation of ideas which stems from good formulation of grammatical expression. This corresponds with the argument made by Manera *et al.* (1989:53) as is reported in Chapter 2 of this research (see par. 2.4.4) that students who have undergone training in co-operative learning are able to express ideas clearly and succinctly. Motivation has been included in the question because it precedes good command of the language. The response to this



question is provided in Table 4.10

**TABLE 4.10**  
**IMPROVED ORAL COMMAND OF ENGLISH**

	<b>N</b>	<b>%</b>
Motivated to speak English	15	25,0
Improved oral English	40	66,7
Knowledge of oral co-operative learning	5	8,3
Nothing	0	0,0
<b>TOTAL</b>	<b>60</b>	<b>100,0</b>

As can be seen in Table 4.10, 66,7% of the participants said they had noticed improvement in their oral English whereas 25,0% of the participants said they became motivated to speak English. The researcher should however like to stress that these responses show participants' perceptions of motivation to speak English and perceptions of improvement in oral English. The major purpose of this research is highlighted in Chapter 1 (see par. 1.4 and 1.5) where it is spelt out that the aim of this research is to see students improve their oral competence in English through the use of co-operative learning. In Chapter 2 of this research the researcher reported findings by Nattiv *et al.* (1991:217) where they argue that the more students participate in co-operative learning discussions the more their self-esteem improves. In Chapter 2 of this research the findings by Manera *et al.* (1989: 53) are reported where they say once students enter into discussions they become acquainted with correct ways of formulating questions and statements. This way the findings in Table 4.10 become confirmed. However the researcher would like to spell it out that there was limited time to do the best. Probably the 8,3% participants who said they had learnt knowledge of the rules of co-operative learning could have changed their minds had they been given longer time.



## **2.8 CO-OPERATIVE LEARNING TECHNIQUES**

In a football match no player plays independently without relying on his team members. A ball has to be passed from one player to the other until it reaches the front-line players. It is the front-line players who usually score goals and the winning goal. It would be untrue and unfair to say the front-liners are the ones who score the winning goal. In actual fact they complete a job which was started by the back line. Players pass the ball from one player to the other. Passing the ball should not be looked at as a simple job. It needs a special skill - a skill that entails thorough practice, knowledge of the rules of the football game and willingness for a player to share the game with his team members. The football team becomes successful because they and the coach have worked together. The coach outlines the strategies the team should use in order to defeat opponents. Players then put into practice all the theories they and the coach discussed. Should the strategies outlined by the coach make the team win, the team has succeeded in their co-operative discussions. Should their strategies fail them, then they need to go back to the drawing board in order to rectify possible flaws that led to their failure.

Just as the football team uses strategies in order to score winning goals, in order for a lecturer to succeed in persuading his/her students to like and participate in co-operative learning activities, he/she needs to be tactful in his/her selection of co-operative learning strategies some of which will be discussed briefly. While there is understanding that there are many co-operative learning strategies, for the purposes of this study only seven co-operative learning strategies will be discussed.

### **2.8.1 Dyad or the learning cell**

McKeachie (1994:146) and Christison (1990:7) use the term dyad' when they refer to activities that students engage in one-to-one with others in class. Students who are engaged in this activity work in pairs mainly to share ideas - or when there is an



### 4.3 CO-OPERATIVE LEARNING IN ENGLISH AS A SECOND LANGUAGE

This question consists of eight sub-questions which are reported from par. 4.2.2.1 to 4.2.2.8.

#### 4.3.1 Purpose of co-operative learning in English

The target group consisted of sixty student participants who use English language as their second language. Practical engagement in oral English activities using co-operative learning would help improve students' command of the English language. The researcher wanted to involve the sixty students in co-operative learning activities so that these same student participants should use it once they complete their teacher training. Because these sixty participants would have been involved in co-operative learning activities there is a strong possibility that they can use it in their respective schools on completion of their course or diploma. The aim of this question was to determine the purpose of co-operative learning. The response to this question is provided in Table 4.11.

**TABLE 4.11**  
**PURPOSE OF CO-OPERATIVE LEARNING IN ENGLISH**

	Yes		No		No response	
	N	%				
1. To share ideas as student teachers	54	90,0	4	6,7	2	3,3
2. To learn to discuss in groups	56	93,3	2	3,3	2	3,3
3. To share ideas and learn from each other	56	93,3	2	3,3	2	3,3

As can be deduced from the information provided in Table 4.11 there was no clear majority. This may have been caused by the fact that participants recognized that all three statements are equally important. Those participants who chose “to discuss in groups” and “ share ideas and learn from each other” make 93,3%. Johnson *et al.* [1991(a):3-7] and Bartlett (1995:33) arguments are reported in Chapter 2, that students show concern for each other or care for each other during co-operative learning . The responses by participants also suggest that participants chose these equally important facts mainly to want to emphasize the fact that whenever there was a co-operative learning activity, participants would be told that they were expected to share. 90,0% of the participants chose “ to share as student teachers”. This response corresponds with Johnson *et al.* [1991(b):12-13) and Bruffee (1995:14) as their arguments are reported in Chapter 2 that in co-operative learning participants “ learn to share toys”. The responses to the open-ended questions had the following to say:

- to learn to ask questions;
- to improve language skills;
- to learn to listen to each other’s ideas; and
- to be given a chance to understand each other.

#### **4.3.2 Personal opinions about the use of co-operative learning at college level**

It was essential to know the participants’ opinions about the use of co-operative learning at college level from their participating in co-operative learning activities as this would assist the researcher to be able to make further recommendations. The researcher sought to know what each participant thought about the use of co-operative learning at college level. Almost all participants were taught in a traditional way where the teacher becomes the custodian of knowledge. It is likely that students have internalized this practice and it may take them even longer to undo it. Other people may think that co-operative learning is a complete waste of time



therefore there has never been anything wrong with the way they have always been taught.

The response to this question is reported in Table 4.12.

**TABLE 4.12**  
**PERSONAL OPINIONS ABOUT THE USE OF**  
**CO-OPERATIVE LEARNING AT COLLEGE LEVEL**

	Yes		No		No response	
	N	%	N	%	N	%
1. Co-operative learning helps improve quality of argument	49	81,7	9	15,0	2	3,3
2. Helps student teachers to be able to speak to friends	34	56,7	24	40,0	2	3,3

Table 4.12 presented responses as follows: 81,7% of the participants agreed that they saw co-operative learning as a possible technique that could help them teach effectively when they start teaching. An emphasis should be made that this only reflects the perception that they can teach once they have completed the course. Responses revealed that participants had found co-operative learning being a useful and probably effective technique in teaching and learning. Above 81% of the participants agreed that co-operative learning improved their quality of argument. This response corresponds with the argument reported in Chapter 2 by Johnson *et al.* [1991(a):3-7] that students argue on a point first before they reach the finality of their argument. The response by 56,7% suggested that participants did acknowledge the fact that co-operative learning demand of them to talk and to interact with other students.

The response to the open-ended question said the following:

- students were conscious of the reality that they studied co-operative learning

- to apply it in the wider community; and
- co-operative learning prepared them to be confident speakers.

Bartlett (1995:133) and Johnson *et al.* [1991(b):11, see par. 2.9] suggest that when students are taught how to use co-operative learning they are prepared for the corporate world. Thus co-operative learning should not be looked at as something that concerns the school environment only but it also has broader horizons. The examples of this, reported in Chapter 2. are that we "... live in a world characterized by pluralism, interdependence, conflict ..." [Johnson *et al.*, 1991(b):11 and Bartlett, 1995:33] (see par. 2.9).

### 4.3.3 Differentiated group member participation

The researcher wanted to know how members of different groups behaved during co-operative learning activities. This response would help inform the researcher to know the re-action of individual participants during group discussions. The response would also assist the researcher to be able to make recommendations to people who may wish to do further research and study on co-operative learning. The response to this question is reported in Table 4.13.

**TABLE 4.13**  
**DIFFERENTIATED GROUP MEMBER PARTICIPATION**

	Yes		No		No response	
	N	%	N	%	N	%
1. Some group members showed no interest	48	80,0	10	16,7	2	3,3
2. One member of the group dominated by wanting to talk more	41	68,3	17	28,3	2	3,3
3. All group members gave one another an opportunity to talk	45	75,0	13	21,7	2	3,3



Table 4.13 presents data as follows: 80,0% of the participants agreed that some members of the group did not show interest in co-operative learning activities. This is problematic as the intention of the researcher was to encourage participants to fully participate in co-operative learning so that they saw the need for their being part of the activities. This suggests that there was not enough close monitoring of the activities, thus the behaviour of some participants threatened the intended aim of the research. Bartlett (1995:133) and Johnson *et al.* [1991(a)3:7] whose research findings were reported in Chapter 2 (see par. 2.3.2) recommended individual accountability in order to check "hitch hikers". The participants' response, therefore suggests that there should have been closer facilitation during co-operative learning. A commendable (75,0%) group of participants agreed that group members gave one another a chance to talk. These findings correspond with Johnson *et al.* [1991(a)3-7] and Bartlett (1995:133) (see par. 2.3.2) whose findings were reported in Chapter 2 that students share the responsibility in face-to-face promotive interaction.

Facilitative work by the researcher sometimes fell short, for 68% of the participants said one member of the group dominated the discussions. Facilitators should not allow this to happen as it may discourage other group members who may be willing to participate.

#### **4.3.4 The meaning of co-operative learning**

Before anybody can participate in co-operative learning it is essential to know what it is, and how it functions. This helps curb the possible misinterpretation of co-operative learning for ordinary group work. Since the participants had probably not had exposure to co-operative learning, the researcher wanted to ascertain whether participants fully understood the meaning of co-operative learning. This would involve knowing the difference between ordinary group work and co-operative learning. Co-operative learning differs from ordinary group work because each



member of the group has been assigned a special task to do. The arguments by Johnson *et al.* [1995(a):1-19] and Bartlett (1995:132) (see par. 2.3.1) on the specific role each member of the group performs are reported in Chapter 2 that in co-operative learning there has to be a recorder, an encourager, a reader and a presenter (see par. 2.3.1). The response to this question is reported in Table 4.14.

This group of participants became too simplistic by associating the definition of co-operative learning with what they were doing during co-operative discussions. They would be grouped and be given learning material and then be expected to start with discussions. The response showed laziness on the part of the participants for, they did not study the meanings contained in the statements before they finally decided on the appropriate meaning of co-operative learning. There is also a possibility that the question was wrongly phrased.

**TABLE 4.14**  
**THE MEANING OF CO-OPERATIVE LEARNING**

	Yes		No		No response	
	N	%	N	%	N	%
1. Students are grouped together to discuss given material	57	95,0	1	1,7	2	3,3
2. Instructional use of small groups that ...	57	90,0	3	5,0	3	5,0
3. Uncertain	4	6,7	44	73,3	12	20,0

It is pleasing to notice that 90,0% of the participants did recognize the appropriate meaning of co-operative learning. However, the researcher need to mention that the emphasis was not on definition of terms e.g. what co-operative learning is, but on how co-operative learning works in a given situation. 73,3% of the participants said they were uncertain as to the meaning of co-operative learning. The researcher used a double negative and this might have confused participants. This means that



participants were not uncertain as to the meaning of co-operative learning. In other words they knew and understood the meaning of co-operative learning.

#### **4.3.5 The use of co-operative learning on completion of the course**

To be able to interpret the results of the research, it was essential to know and ascertain if the participants would use co-operative learning after teacher training. This would help the researcher to be able to assess the general acceptance (by the participants) of co-operative learning. Consequently the general acceptance would mean co-operative learning would have succeeded. In the academic world it is pleasing to see people accept new ideas, which are meant to improve the standard of or the level of ones education. If the participants indicated that they saw the need for co-operative learning to be used in the classroom, this would mean this academic research would have contributed meaningfully to the improvement of teaching and learning in higher education. Acceptance of co-operative learning by participants would also encourage further research. The response to this question is reported in Table 4.15.

The information in Table 4.15 provides the following: Participants saw co-operative learning as a viable option for students to improve their oral communication and that naturally reserved students “open up” and become part of the discussions. It was also commendable to get to know that student participants noticed that more participation in co-operative learning would mean the lecturer gets to know his/her students closer. 83,3% of the participants agreed that the lecturer gets to know his/her students’ progress in oral English.

**TABLE 4.15**  
**THE USE OF CO-OPERATIVE LEARNING ON**  
**COMPLETION OF THE COURSE**

	Yes		No		No response	
	N	%	N	%	N	%
1. It provides opportunity for students to improve their oral communications	58	96,7	2	3,3	0	0,0
2. It gives the lecturer/facilitator an opportunity to know higher students oral progress	53	88,3	7	11,7	0	0,0
3. Naturally reserved students become comfortable when they discuss learning material among themselves	57	95,0	3	5,0	0	0,0

These findings correspond with the argument by Johnson *et al.* [1991(a):3-9] as reported in Chapter 2 (see par. 2.2.4) that students who participate in co-operative learning learn to communicate accurately and unambiguously. This response corresponds with the response that co-operative learning provides an opportunity for students to improve oral communication. A person whose oral communication is good usually expresses himself/herself clearly and precisely in conversations.

#### **4.3.6 Problems encountered when participating in co-operative learning activities**

The information provided by the participants would help inform the researcher (for the future) about problems that are likely to arise during co-operative learning activities. He could make recommendations to people who wish to use co-operative learning in the classroom about such problems. The researcher also asked



participants this question so that he could assess if participants realised that there has to be close monitoring of activities in co-operative learning like to explain the procedures that should be followed before co-operative learning activities are embarked on. This would help sensitize participants themselves towards realising the need to give clear guidelines that should be followed before students can participate in co-operative learning. The argument by Manera *et al.* (1989:54) as reported in Chapter 2 (see par. 2.6) puts it clearly that one of the major principles of co-operative learning is that the facilitator has to clarify all the appropriate necessities of co-operative learning. The response to this question is provided in Table 4.16

**TABLE 4.16**  
**PROBLEMS ENCOUNTERED WHEN PARTICIPATING IN**  
**CO-OPERATIVE LEARNING ACTIVITIES**

	Yes		No		No response	
	N	%	N	%	N	%
1. Some fellow student group members did not participate actively	52	86,7	8	13,3	0	0,0
2. Learning material was not well explained by the facilitator	28	46,7	32	53,5	0	0,0
3. There is no effective learning when students are doing work themselves	16	26,7	44	73,3	0	0,0
4. There is a lot of time spent preparing and discussing learning material	47	78,3	13	21,7	0	0,0

The information in Table 4.16 reveals the following: the main problem was that some fellow student group members did not participate actively. The researcher expected this response to exceed 90% because from his observation this is the area that participants always mentioned that time was rather limited. It is disturbing to observe that 86,7% of the participants say some members did not participate



actively. The researcher however regrets to note that this was a serious discrepancy. The argument by Manera *et al.* (1989:53) as reported in Chapter 2 (see par. 2.6) warns that teachers should not view co-operative learning as a period of relief from the actual teaching. This implies that the facilitator should work closer with his/her students with the view to monitoring students' active participation in activities, and moving around in class should not be looked at as a threat but as means used to promote progress. From this response it becomes evident that the researcher did not monitor co-operative learning activities closely.

However, it is pleasing to notice that 78,3% of the participants did notice that co-operative learning demands a lot of time where student participants have to collect learning material, study the learning material, do assignments after role-play allocation until the presentation is done by the presenter. Co-operative learning is a process. Students have to be given a specific responsibility to do before the actual co-operative learning activity is done. This finding shows success as preparation for co-operative learning activities demand time. 73,4% of the participants said there was no effective learning where students worked alone and that learning material was not well explained before they got ready to participate in co-operative learning. Learning material may not have been explained before co-operative learning activities. This corresponds with the finding of Bartlett (1995:132) and Johnson *et al.* [1991(a):1-19] as reported in Chapter 2 (see par. 2.3.1) that co-operative learning group member should be given a specific role to play. However, this does not seem to have happened. Although this is not a good response, 53,3% of the participants said it is untrue to say that learning material was not explained by the facilitator. These participants might be those who were always attentive during the co-operative learning practical activities and as a result they were happy and contented with the explanation of the learning material. 73,3% of the participants said it is untrue to say that there is no effective learning when students do the work on their own.



### 4.3.7 Presentation of learning material by the presenter

The presenter holds a supreme position in co-operative learning; that of summarizing and presenting the work of a collective effort. Presentation of discussed material requires certain skills like crispness and appropriateness. The researcher asked this question with the view to getting the feel of the rest of the participants about the responsibility the presenter had. On getting the responses to this question the researcher would assess and make recommendations where essential.

The response to this question is presented in Table 4.17.

**TABLE 4.17**  
**PRESENTATION OF LEARNING MATERIAL BY THE PRESENTER**

	Yes		No		No response	
	N	%	N	%	N	%
1. The presenter presented his/her own ideas from the learner	24	40,0	36	60,0	0	0,0
2. The presenter presented ideas discussed, agreed upon and shared by all co-operative learning group members	57	95,0	3	5,0	0	0,0
3. The presenter did present ideas shared by all co-operative learning groups	46	76,7	14	23,3	0	0,0

As can be seen in Table 4.17, 60% of the participants denied the fact that the presenter presented his/her own ideas. It is interesting that 95% of the participants agreed that the presenter presented ideas discussed, agreed upon and shared by all students who were participating in co-operative learning. This is a convincing

response and the finding reflects the understanding (by the participants) of how the presenter performed his/her task. 76% said the presenter did present ideas shared by all participants. In the statement where 95% of the participants responded positively there were details like discuss and agreed upon. These are crucial words in co-operative learning. Material presented should be the material that has earned consensus of all participants. 40% of the participants said the presenter presented his/her own ideas. This response presented a problem, for it cannot be ignored.

The open-ended questions provided the following responses:

- although he/she paid attention to all group members, he/she seemed to favour certain groups and individual members; and
- the presenter will improve and gain more confidence.

The two statements suggest the following: that presenters at some stage do seem to have a bias towards other groups and individuals and the last statement suggests that some presenters needed more time in order to present collective work with confidence.

#### **4.3.8 The role of the researcher during co-operative learning discussions**

It was essential for the researcher to know what perceptions of the participants were like regarding his work. As one of the most important duties, the researcher has to move about the groups mainly to ascertain if discussions were going on as planned and anticipated. He would do this in a consultative way e.g. ask participants if they experience problems, ask if he could clarify certain things and influence co-operative learning discussions. The researcher asked this question in order to know from participants if they recognised and understood the role facilitator has to play during co-operative learning. This would help inform this study.



The response to this question is reported in Table 4.18.

**TABLE 4.18**  
**THE ROLE OF THE RESEARCHER DURING**  
**CO-OPERATIVE LEARNING DISCUSSIONS**

	Yes		No		No response	
	N	%	N	%	N	%
1. He/she involved all members of the group	55	91,7	5	8,3	0	0,0
2. He/she concentrated on those who were talkative	15	25,0	45	75,0	0	0,0
3. He/she encouraged everybody to participate in discussions	54	90,0	6	10,0	0	0,0

As can be seen in Table 4.18, 91,8% of the participants agreed that the researcher involved all group members. This response gave good exciting results and this also strengthened the researcher's belief that a person who facilitates co-operative learning activities should not sit down and expect participants to do things on their own without the assistance of the facilitator. 90,0% of the participants said the researcher encouraged all group members to participate. This response corresponds favourably with the findings by Johnson *et al.* [1991(a):1-19] (see par. 2.3.1) as reported in Chapter 2 that a facilitator's role is that he/she ascertains if all members of the group participate during co-operative learning discussions. This finding is also encouraging in that participants did recognise the role the researcher has to play. Probably the participants will do the same on completion of the course, should they be appointed as teachers. It is also interesting to note that 75% of the participants disagreed with the statement that the researcher concentrated on talkative participants as opposed to only 25% who said the researcher concentrated on talkative participants.

## **4.4 POST CO-OPERATIVE LEARNING ACTIVITIES**

This section consists of two separate questions in connection with the participation in co-operative learning activities and the analysis and interpretation of co-operative learning results thereof.

### **4.4.1 Participants' post co-operative learning activity perceptions**

In Chapter 3 of this research the research design suggests that participants were to get involved in pre-co-operative learning activities where each participant would work as an individual. The pre-co-operative activities demanded participants to work on an individual basis. Participants would be rewarded for an individual effort and rewards would contribute to their final mark in the end. Since questions were asked after the whole co-operative learning activities had been completed, the researcher needed to know participants' perceptions when they reflected on co-operative learning as an activity-driven exercise. The question is broad, therefore it covers a large area of what participants had done. The researcher wanted to ascertain if participants understood the broader picture of co-operative learning as statements cover various areas of co-operative learning.

The full response to this question is reported in Table 4.19.



**TABLE 4.19**  
**PARTICIPANTS' POST CO-OPERATIVE**  
**LEARNING ACTIVITY PERCEPTIONS**

	Yes		No		No response	
	N	%	N	%	N	%
1. I participated with confidence	58	96,7	2	3,3	0	0,0
2. I learnt all learning material without a problem	35	58,3	25	41,7	0	0,0
3. I studied all learnt material with ease	36	60,0	24	40,0	0	0,0

As can be seen in Table 4.19, the majority (96,7%) of the participants participated in co-operative learning activities with confidence. This is a commendable result. The argument by Manera *et al.* (1989: 53) (see par. 2.4.6) as reported in Chapter 2 that among the outcomes that are promoted by co-operative learning there are higher reasoning skills, improved articulation of ideas and positive self-esteem. These are attributes to improved self-confidence. The 96,7% response by participants have proven the research studies on co-operative learning to be successful and thus participants have agreed that since they became involved in co-operative learning they have developed self-confidence. 58,3% of the participants said they learnt all material without a problem. This is true in that once learning material has been discussed together with the researcher doing his/her job, participants should not find it extremely difficult to study the learning material. This response is however, not pleasing, for it depicts a marginal agreement. 60,0% of the participants said they studied learning material with ease. This is not a good response. This suggests that during co-operative learning activities the encourager must have failed to do his/her work properly. Roles of individuals do not seem to have been clearly grasped as arguments by Johnson *et al.* [1991(a):3-7] and Bartlett (1995:133) (see par. 2.3.1) are reported in Chapter 2 that roles for each participant should be clearly explained by the facilitator. It is quite disturbing that 41,7% of the participants said they found it difficult to learn material and also that

40% of the participants said they did not study learning material with ease. Probably these participants were lacking reading skills, which was not part of this research. It becomes difficult to understand this problem because participants were studying a post grade twelve teachers' course.

#### 4.4.2 Co-operative learning results

In any institution where there is some work to be done and completed at a certain stage people expect results. Results are an ultimate outcome of an effort after probably short, medium and long term attempts to get the task completed. Results usually tell it all, for they either are a proof of success or failure.

It was essential to ask participants a question that demanded results because the activities they were involved in had intermittent results all the time. Co-operative learning is a process that needs to be tested time and again until the final result is arrived at. The researcher wanted to finally assess if the research was a success and that after the final results there needed to be a conclusion on the research. The response to this question is reported in Table 4.20.

**TABLE 4.20**  
**CO-OPERATIVE LEARNING RESULTS**

	Yes		No		No response	
	N	%	N	%	N	%
1. Test results were a true reflection of what happens in equal co-operation learning group discussions	58	96,7	2	3,3	0	0,0
2. Nobody competes to score higher marks than others	47	78,3	13	21,7	0	0,0
3. All group members feel responsible for their own learning	54	90,0	6	10,0	0	0,0



As can be seen in Table 4.20, the following were responses from the participants: 96,7% agreed that co-operative learning group discussion results reflected what happened during co-operation. This response indicated a success of this research. 90,0% of the participants saw the promotion of student learning in co-operative learning. This finding confirms the findings observed by Bartlett (1995:133) (see par. 2.3.2) as reported in Chapter 2 that in co-operative learning students promote their own learning.

The third response said nobody competes where co-operative learning takes place. This was a very reasonable response from participants since 78,3% of them confirmed that nobody competes in co-operative learning. This response corresponds with the argument by Johnson *et al.* [1981(c):51] (see par. 2.4.4) as is reported in Chapter 2 that there is no competition in co-operative learning.

3,3% of the participants said test results were not a true reflection of what transpired in co-operative equal sharing. This is a small percentage and perhaps could be ignored. 21,7% of the participants said it is untrue that nobody competes in co-operative learning. Although this response is less than the positive response to the question, it does cause some concern. This may suggest that these participants needed more training in order for them to realise the importance of co-operative learning. Only 10% of the participants felt it is untrue that group members were responsible for their own learning. This is probably another response that caused concern. These participants needed more training.

The summary of this research will now be discussed in detail.

## **4.5 SUMMARY**

This chapter focused on the presentation, analysis and interpretation of the research results. The interpretation of the research results was directly linked to the

findings of the literature review, where applicable in Chapter 2.

The chapter looked at the various responses by participants. Sixty participants became part of the experimental exercise on co-operative learning. These sixty participants ended up responding to the questionnaire that took them approximately one-and-half hours to respond to.

Among participants' responses they responded by saying that co-operative learning could be used as an alternative approach to teaching and learning in higher education. Participants also agreed that they were going to use and apply co-operative learning in schools when they qualified as teachers.

Since there was an indication that the majority of the participants knew and understood the meaning of co-operative learning, there is a hope that these participants are likely to remember and use co-operative learning throughout their teaching career. Generally all participants indicated by saying that they developed confidence to self-confidence after they had participated in co-operative learning. This showed a positive attitude towards co-operative learning.

This section presented the summary of the results of the findings of the research. Chapter five presents synthesis of the findings, conclusion and recommendations of the research. It will now be discussed in detail.



## CHAPTER 5

# SYNTHESIS OF FINDINGS AND CONCLUSIONS, RECOMMENDATIONS AND CONCLUSION

### 5.1 INTRODUCTION

The previous chapters of this research have dealt with:

- an introduction to the problem of study;
- a review of the relevant literature;
- the design and the methodology of the study; and
- data, data collection and data analysis.

Findings of the research which become its gist may either be in favour of the intended research problem or may be the contrary. Findings of this research have not produced clearly defined outcomes probably due to some intricacies in as far as questioning is concerned and also the three-weeks time allocation to co-operative learning activities was rather short.

As this chapter marks the end of the research work, the researcher would like to recapitulate its most outstanding points. The sections that will be summarized are the following:

- synthesis of the findings and conclusions;
- recommendations; and

- conclusion

## 5.2 SYNTHESIS OF FINDINGS AND CONCLUSIONS

The theme of the literature review centred around research findings which stated that students who get involved in co-operative learning improve their competence in oral English. However, the improvement of competence does not only affect oral English but also other fields of study. The literature review has also revealed that students who became part of co-operative learning improved academic achievement and their articulation of ideas is good as is reported in Chapter 2. The findings of the aforementioned as reported in Chapter 2 are made by Christison (1990:9), McKeachie (1994:145) and Manera *et al.* (1989:53) (see page 37/38).

The researcher reported findings made by Johnson *et al.* [1991(a):3-7] (see par. 2.3.1) where their argument is reported that students who get involved in face-to-face interaction do so with the view to encouraging and facilitating each other's efforts.

Cowley (1989) in Ramsden (1994:175) reported the observation he made when student participants in co-operative learning were told to "tackle the problem in groups of three or four". He observed that students who participated in co-operative learning gradually shifted from teacher dependence to independence. Cowley wished to demonstrate the acceptance of responsibility of own learning by students (see par. 2.5).

In a concluding paragraph in Chapter 2, Kapp (1994:6) as his findings are reported, argues that higher education teaching and learning should refocus attention on teaching "for active, and co-operative learning strategies and teachers are becoming facilitators of learning" (see par. 2.8.7). Findings by Kapp (1994) confirm other findings that co-operative learning needs facilitators so that participants can



promote each other's learning. Co-operative learning participants should be made to develop themselves so that they are able to master its intricacies. It is the literature on co-operative learning that brings about the differences between ordinary group work and co-operative learning. Co-operative learning is different from ordinary group work in that in it each group participant is assigned a special function to do. Johnson *et al.* [1991(a):3-7] as their argument is reported in Chapter 2 (see par. 2.3.1) point out that in co-operative learning there has to be an encourager (whose duty it is to encourage other group participants), a reader (whose duty it is to read the learning material), a recorder (whose duty it is to record all discussions during co-operative learning) and a presenter (to present all discussed matters). Co-operative learning serves as a specialised type of group work.

### **5.2.1 Research findings**

#### **(a) Gender**

There were more female teacher trainees than there were males at Madadeni College of Education. As it is traditional that gender be included in a research sample, the researcher included gender in this research.

#### **(b) Age groups**

Any academic study that requires projects to be undertaken prefers to involve younger people because what they learn at an early age is assumed that they can make use of it and teach the many generations to come. This research included 50% student teachers younger than thirty years because they may teach for a long period.

**(c) *Personal feelings about performance in the first test***

83,3% of the participants said that they were excited to very excited about their performance in the first test. This percentage demonstrates success in terms of this category. All participants were happy now that they had attained a pass. Those who had mixed feelings constituted 11,7%. These participants did not produce good results.

**(d) *Scores in the individual test before participating in co-operative learning***

Individual writing or action demands competition. These participants needed such exposure so that they would learn from it. Whenever there is individual performance, competition is implied. It is interesting to note that only 18,3% of the participants pointed out that their results rated them above average. When the average and above average responses are added together they form 95,0%. This result suggests that although the response was above 90,0%, participants needed to be drilled in co-operative learning.

**(e) *Comparison of co-operative learning results with individual test***

The findings from this category are not convincing. It was only 60% of the participants who responded by saying that they had improved. Even if "have improved" is combined with "have improved slightly", they make up 76,7%. Those who responded by saying that "students get fair scores" constituted 18,3%. These participants were only interested in results and not in improving their academic achievement. There was a small percentage of the participants who saw no difference.



**(f) *Co-operative learning as an alternative learning approach in higher education***

Those participants who responded by saying that they “agree to strongly agree” that co-operative learning can be used as an alternative learning approach in higher education constituted 90,0%. These findings can be regarded as positive because the responses came from participants who were directly involved in the actual experiment of co-operative learning. The researcher regarded these responses as perceptive responses from participants. However an observation was made that those who decided to be neutral, to disagree and strongly disagree with the question that co-operative learning can be used as an alternative learning approach in higher education probably needed more time to get involved in co-operative learning activities so that they would gradually see the change. When these responses were added together they made 20,0% of the participants.

**(g) *Lecturer-centred learning***

The findings from this question were not as pleasing as they were expected. From the responses to this question 53% of the participants agreed to strongly agree that English lectures were lecturer-centred. Those participants who responded by saying that they disagreed to strongly disagree that the lectures were lecturer-centred constituted 51,7%. This was a marginal response, for it was a little above fifty percent.

**(h) *The role played by researcher during co-operative learning activities***

The response to this question was not convincing. Only 56,7% of the participants were able to recognise the role the researcher played during co-operative learning

activities. The response to this question indicated failure by the participants to know the role the person who facilitates co-operative learning assumes. It also indicated shortcomings on the part of the researcher to have failed to explain clearly all roles before the activities. Roles should have been clearly explained to participants so that they would do something they fully understood.

**(i) *Role each participant played in co-operative learning***

The roles of a presenter and researcher are important roles in co-operative learning. 86,7% of the participants indicated by saying they had chosen the role of a researcher (a participant in co-operative learning) and a presenter. It is assumed that participants who chose these two roles had good qualities like those of crispness, erudition and leadership. The Zulu speaking people, especially those of the age of the participants tend to shy away from responsibilities like those that demand of them to work closely with people. That is why the percentage of their response was below 95%.

**(j) *Improved oral command of English***

One of the major objectives of this research was to make students realise the need for them to engage in a practical exercise of co-operative learning so that they eventually improve their command of the English language. Only 66,7% of the participants acknowledge improvement of their oral English. This finding did not indicate a resounding success but suggests that there should be more practical activities in co-operative learning so that participants can gradually improve themselves orally in English. With only 25,0% of the participants saying they became motivated to speak English, this finding did not show success. At least 8,3% of the participants said they had the knowledge of co-operative learning. This was also a disappointing response. The findings therefore did not indicate success.



## **5.2.2 Findings of different question about co-operative learning in English**

### **(a) *Co-operative learning in English***

The findings of this question were as follows:

90,0% of the participants said co-operative learning promotes sharing while the other responses (93,3% and 93,3%) said that co-operative learning in English promotes group discussions and that they learn to share with others. The findings of this category indicated success, for all participants realised that they had to share ideas in co-operative learning and also they had to learn from each other.

### **(b) *Personal opinions about the use of co-operative learning at college***

91,7% of the participants said student teachers learnt from co-operative learning and therefore they can use it in their respective schools when they complete the course. 81,7% of the participants realised that co-operative learning improves the quality of arguments. The researcher regarded these two responses as successful. The third findings that constitute 56,7% of the participants' responses had said that co-operative learning helps students to be able to speak to friends was far below the expectations of the researcher.

### **(c) *Differentiated group member participation***

The findings from this question were quite disturbing. 80,0% of the participants said some group members did not show interest in co-operative learning group discussions. This was either caused by the lack of tight facilitation by the facilitator

or the encourager failed to do his/her job. It was also disturbing to note that 68,3% of the participants said one member of the group was dominant during co-operative learning discussions. The encourager did not play his/her role effectively. 75% of the participants said that all members of the groups gave one another an opportunity to talk. This was a fair finding although the remaining percentage indicated or hinted towards more practical work on co-operative learning.

#### **(d) *Meaning of co-operative learning***

The most appropriate answer that was expected from the responses to this question was "... the instructional use of small groups ...". 90,0% of the participants did realise the meaning of co-operative learning. Since the response to this question was 90,0% the researcher qualifies it as a success. 95% of the participants said that co-operative learning is when students are grouped together to discuss given material. The finding from this response suggested that all these participants did not give this response a careful thought. They simply looked at "group together" and "discuss given material" and took it for granted that they gave the correct meaning of co-operative learning.

The researcher used a double negative to ask if participants knew the meaning of co-operative learning. This was a confusing question however, 73,3% of the participants said they knew the meaning of co-operative learning.

#### **(e) *Use of co-operative learning on completion of the course***

The findings from this question were pleasing for, most participants (96,7%) said co-operative learning provides an opportunity for students to improve their oral communication. Clearly with constant use of co-operative learning as teachers, these participants would improve their oral English. 95,0% of the participant realised



that the reality that even naturally reserved students participated in co-operative learning activities. 88% of the participants said the facilitator gets an opportunity to know students' progress well. There is full evidence that all participants are positive about their having been part of co-operative learning and therefore this means students were confident. Only 11,7% of the participants denied that the facilitator got to know students well. Probably the participants needed more time to see this.

**(f) *Problems encountered when participating in co-operative learning***

The results of these findings of co-operative learning were disappointing (see par. 4.3.6). 86,7% of the participants said some members of the group did not participate as against 13,3% who said they did. The facilitator should have monitored this even before it happened. It is true that a lot of time is needed in preparation for co-operative learning activities. 78,3% of the participants confirmed this finding. There were also two other disturbing findings that; there is no effective learning when students are doing work on their own and that learning material was not well explained. Although there is a small percentage difference between these two there ought to have been none. The learning material should have been explained by the reader, but it seems that this did not happen.

**(g) *Presentation of learning material by the presenter***

It is pleasing to report the findings of this category that 95% of the participants agreed that the presenter presented ideas that were discussed, agreed upon and shared by all co-operative learning group members. The researcher sees the results of these findings as a success. There were 60,0% of the participants who said that the presenter did not present his/her own ideas as against 40% who said the opposite. It is also worth taking note that 76,7% of the participants recognised that

before presentation, learning material had to be shared by all. Only 23,3% of the participants did not agree to this. This suggested that these participants needed more time to participate in co-operative learning activities.

#### **(h) *Role of the researcher during co-operative learning***

It is again pleasing to note that 91,7% of the participants became aware of the involvement of all group members in co-operative learning activities. It is also encouraging to note that 90% of the participants said that the facilitator encouraged everybody to participate in co-operative learning discussions. There were only 25% of the participants who denied the fact that the facilitator did not concentrate on those participants who were talkative. 75,0% of the participants said that this was not true.

### **5.2.3 Post co-operative learning activity perceptions**

#### **(a) *Participants' post co-operative learning activity perceptions***

96,7% of the participants indicated by saying that they had become confident after they had participated in co-operative learning. The researcher looked at these responses as a success because they exceeded the 90% point.

Some participants said they did study all learning material with ease. Although the researcher expected a higher percentage response because participants had already studied and discussed learning material, there were however, 60% of them who did not find difficulty in studying learning material. 24% did not agree to this. These are participants who might not have concentrated during group discussions. Although the percentage is above half (58,3%), this group of participants said they



learnt all learning material without any problems.

### **(b) Co-operative learning results**

The majority participants said the results they had each got were a true reflection of co-operative learning. Another response worth taking note of is that 90% of the participants acknowledged that they became responsible for their own learning. 78,3% of the participants said nobody competes in co-operative learning. This is true. However, 21,7% of the participants said it was not true that there is no competition in co-operative learning. These participants probably needed more involvement in co-operative learning activities and be constantly asked if they still stood by their initial answers (see par. 4.4.2).

Having discussed synthesis of findings, the researcher will now discuss conclusions.

## **5.2.4 Conclusions**

Based on the findings of the questionnaire, the following conclusions can be made:

- there is agreement that co-operative learning can be used effectively as an alternative approach to teaching and learning in higher education;
- co-operative learning can be used at college level because student teachers learn from each other and that if used at college, student teachers are likely to use it and apply it when they start their teaching career;
- when students constantly participate in co-operative learning, the quality of their argument improves;

- learning material takes time to explain. It therefore remains the duty of the facilitator to explain all learning material clearly until such time they are satisfied that all participants have understood it;
- some lecturers need to be oriented towards realising that they are expected to change their approach to teaching and learning. They should not always want to own the subject matter but be prepared to listen to students' ideas and keep abreast of the new teaching and learning developments;
- co-operative learning cannot succeed unless the lecturer knows and understands its intricacies. Co-operative learning should not be taken simply as another type of group work. Co-operative learning is different from ordinary group work because in co-operative learning each group member has a specific duty to do.
- co-operative learning demands facilitation. Facilitation means rounding up all groups with the aim to assisting when necessary;
- unless monitored closely, some members of co-operative learning groups may not participate fully. They may remain a major problem;
- if used most of the time, co-operative learning can help improve students participation and sharpen their confidence in dealing with problems; and
- the presenter, presents discussed matters on behalf of the group.

### **5.3 RECOMMENDATIONS**

The following recommendations are made for possible further research application. These can probably contribute to practical applications of co-operative learning



activities in both colleges of education and higher education.

- the feasibility of co-operative learning in all courses in higher education must be explored;
- the co-operative learning techniques that are needed in order to make students enjoy learning through co-operative learning activities must be studied;
- the differences between ordinary group work and co-operative learning must be studied and students be made aware of it;
- whenever students have been involved in co-operative learning activities, an evaluation system, which will help the facilitator to use continuous assessment must be developed. By doing this students take every activity seriously as participation will count in their favour;
- the perceptions of co-operative learning from among the participants must be explained and the aims of co-operative learning must be explained so that they participate with understanding;
- students must be encouraged to cultivate the habit of working co-operatively without the assistance of the lecturer;
- appropriate co-operative learning material to the course of study must be developed; and
- students must be encouraged (by the college staff) to use co-operative learning when they teach.

## 5.4 CONCLUSION

This research has shown some weaknesses among which is that it targeted a small percentage of participants, making it difficult to generalise. Some of the questions were not as explicit as was intended and this resulted in responses that were not appropriate to the researcher's expectations.

It is envisaged that the research can serve as a foundation for further and intensive study in co-operative learning, for there is some valuable information that can be utilized.

The research problem as it is reported in Chapter 1 (see page 3) was that Madadeni College of Education students fail to express themselves eloquently in spoken English. Co-operative learning activities came into play because they were considered to be the possible strategy to use in order to help improve students English speaking skills. Students who participated in co-operative learning activities were expected to have mastered good English speaking skills and to be able to express themselves eloquently in spoken English by the time they completed participation in co-operative learning.

This research study somewhat succeeded in responding to the problem of the research. Most student participants have agreed that co-operative learning should be used as an alternative approach in higher education. Participants also indicated their improved command of English after they had been involved in co-operative learning and they also became motivated to speak it.

The findings have also proved that co-operative learning cannot be used at college and higher education only but should also be applied in schools. This statement was supported by participants who declared their confidence in speaking English after they had participated in co-operative learning.



This research has made it possible for more research to be done in co-operative learning. If this could be used not only in colleges of education but also in schools as well, it may help shape many generations to come in South Africa.

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**APPENDIX A**

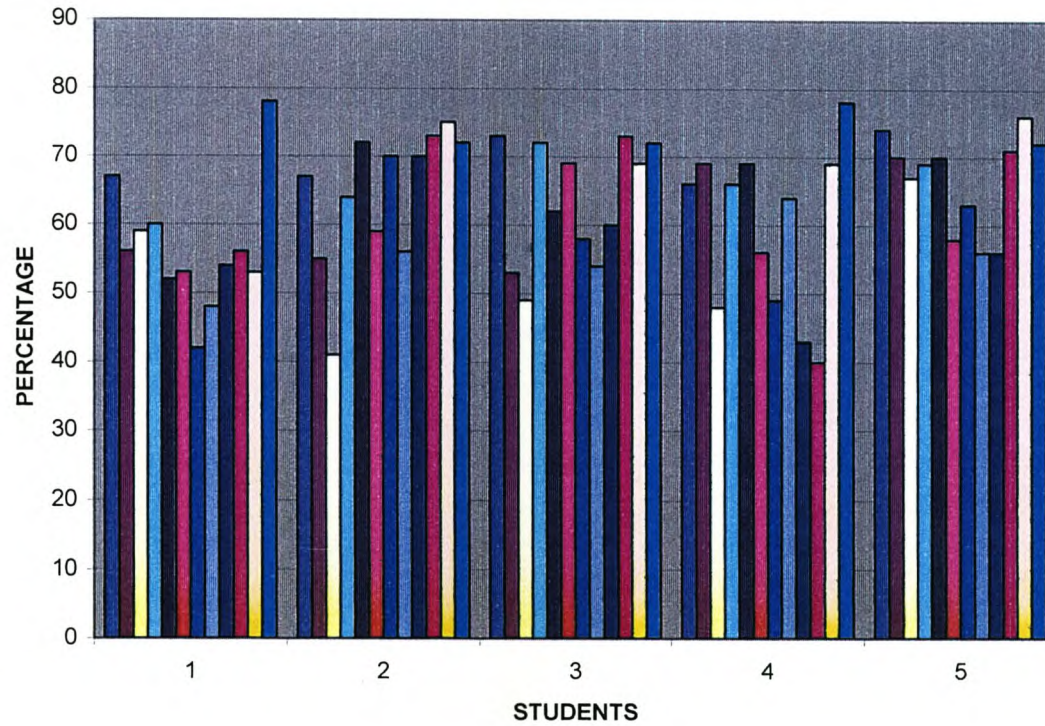
**FINAL RESULTS IN ACTIVE CO-OPERATIVE LEARNING**

## APPENDIX A

GROUP						INDIVIDUAL					
Learner errors and error analysis	84	88	88	88	88	Asking for, giving & refusing permission	67	67	73	66	74
Description of errors	82	80	80	80	82	Asking for & giving advise	56	55	53	69	70
Who should correct learner errors	56	52	52	52	52	Agreeing & disagreeing (formal)	59	41	49	48	67
Who should correct learner errors	84	75	72	69	61	Asking for & offering things	60	64	72	66	69
How should learner errors be corrected	67	76	57	67	67	Asking for and giving directions	52	72	62	69	70
How should learner errors be corrected	65	62	61	62	65	Asking for help	53	59	69	56	58
Should learner errors be corrected	64	64	64	64	63	Making suggestions	42	70	58	49	63
Should learner errors be corrected	68	68	68	68	68	Making plans together	48	56	54	64	56
When should learner errors be corrected	59	59	58	59	59	Agreeing & disagreeing (formal)	54	70	60	43	56
When should learner errors be corrected	76	76	76	76	76	Inviting People	56	73	73	40	71
Which learner errors should be corrected	76	76	76	75	76	Inviting People	53	75	69	69	76
Which learner errors should be corrected	78	72	72	78	72	Inviting People	78	72	72	78	72

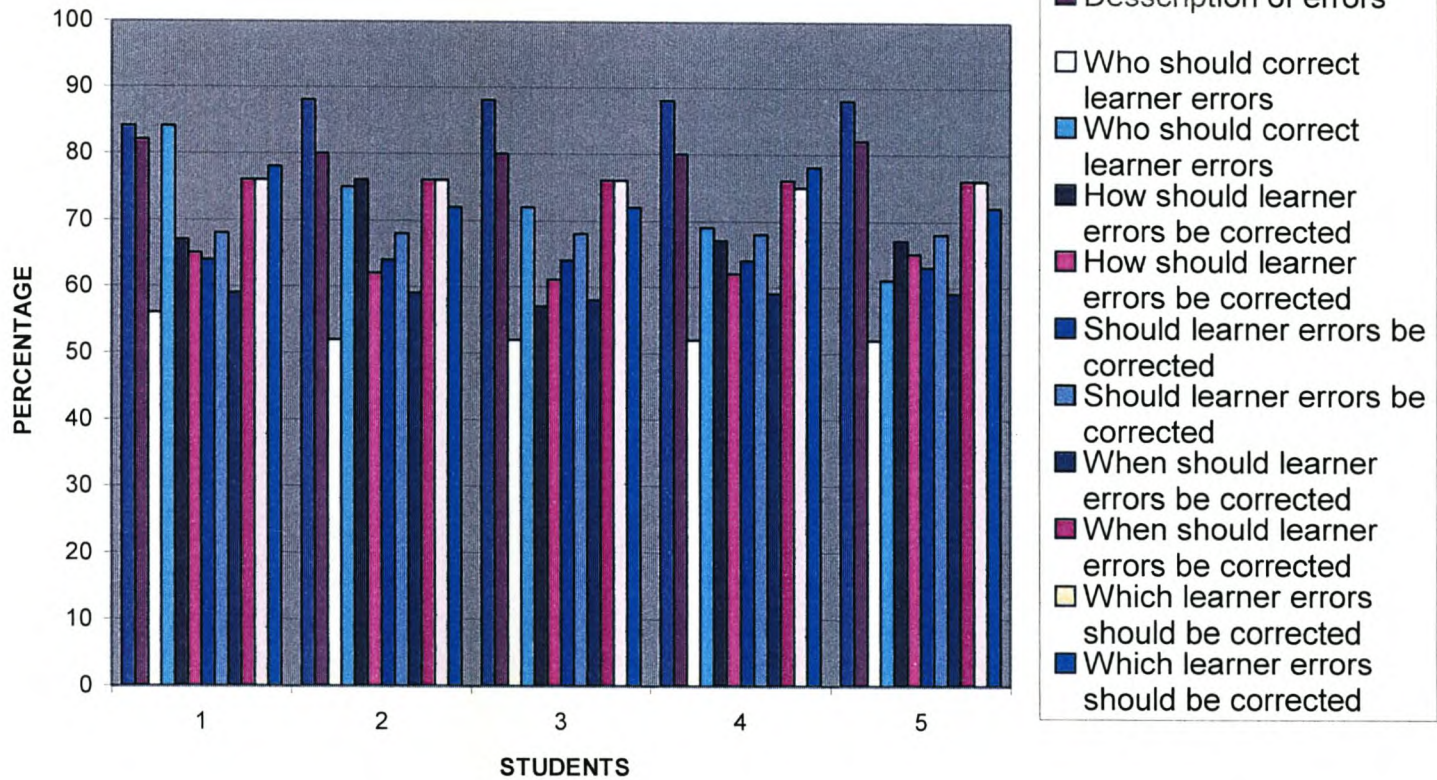


### INDIVIDUAL PARTICIPATION



- Asking for, giving & refusing permission
- Asking for & giving advise
- Agreeing & disagreeing (formal)
- Asking for & offering things
- Asking for and giving directions
- Asking for help
- Making suggestions
- Making plans together
- Agreeing & disagreeing (formal)
- Inviting People
- Inviting People
- Inviting People
- Inviting People

### GROUP PARTICIPATION





**APPENDIX B**

**ERROR CORRECTION IN FOREIGN  
LANGUAGE TEACHING  
(HENDRICKSON, 1978)**

**AND**

**LEARNER ERRORS AND ERROR ANALYSIS  
(ELLIS, 1994)**

**ERROR CORRECTION IN FOREIGN  
LANGUAGE TEACHING  
(HENDRICKSON, 1978)**



# Error Correction in Foreign Language Teaching: Recent Theory, Research, and Practice

James M. Hendrickson

## AN HISTORICAL PERSPECTIVE OF LEARNER ERRORS<sup>1</sup>

### Audiolingualism and Error Prevention

Throughout the 1950s and well into the 1960s, the audiolingual approach to teaching foreign languages was in full swing. Language students were supposed to spend many hours memorizing dialogs, manipulating pattern drills, and studying all sorts of grammatical generalizations. The assumed or explicit aim of this teaching method could be called "practice makes perfect," and presumably some day, when students needed to use a foreign language to communicate with native speakers, they would do so fluently and accurately.

We now realize that this was not what in most cases occurred. Some highly motivated students from audiolingual classrooms managed to become fairly proficient in a foreign language, but only after they had used the language in communicative situations. Predictably, most students who could not or did not take the effort to transfer audiolingual training to com-

municative use soon forgot the dialog lines, the pattern drills, and the grammatical generalizations that they had studied or practiced in school. Put simply, the students had learned what they were taught—and soon forgot most of it.

Not only did many supporters of audiolingualism overestimate learning outcomes for most language students, but some of them regarded second language errors from a somewhat puritanical perspective. For example, in his book, *Language and Language Learning*, which became a manifesto of the language teaching profession of the 1960s, Nelson Brooks (1960) considered error to have a relationship to learning resembling that of sin to virtue: "Like sin, error is to be avoided and its influence overcome, but its presence is to be expected" (p. 58). Brooks suggested an instructional procedure that would, ostensibly, help language students produce error-free utterances: "The principal



method of *avoiding* error in language learning is to observe and practice the right model a sufficient number of times; the principal way of *overcoming* it is to shorten the time lapse between the incorrect response and the presentation once more of the correct model" (p. 58). If students continued to produce errors using this stimulus-response method, inadequate teaching techniques or unsequenced instructional materials were to blame (Corder, 1967, p. 163). Appearing one year later in 1961, *The Teacher's Manual for German, Level One*, prepared by the Modern Language Materials Development Center (1961), provided specific guidelines for correction of student errors. The *Manual* states that teachers should correct all errors immediately (pp. 3, 17, 21, 26), and that students should be neither required nor permitted to discover and correct their own mistakes (pp. 28, 32).

Many foreign language educators never questioned the validity of this mechanistic approach to error prevention and error correction. In fact, well into the 1970s some of them continued to endorse it. The following statement, for example, is found in the introduction to an elementary English course published in 1970: "One of the teacher's aims should be to prevent mistakes from occurring. In the early stages while the pupils are wholly dependent on the teacher for what they learn, it should be possible to achieve this aim" (Lee, 1970). Similar advice was given to teachers in a first-year Spanish textbook, published four years later. Under the rubric "Suggestions for classroom procedure," the authors list suggestion No. 5: "Whenever a mistake is made, the teacher should correct it at once and then repeat the correct pattern or question for the benefit of the entire class" (Hansen and Wilkins, 1974, p. xvii).

Structural linguists introduced another mechanism for helping language teachers deal with students' errors. This mechanism, called contrastive analysis, assumed that interference from students' first language caused errors to

occur in their target language speech. Many linguists believed that once a teacher had a systematic knowledge of the differences between the two languages, he or she could begin developing appropriate instructional techniques and materials that would help students avoid producing errors. However, considerable empirical evidence indicates that although interference from students' native language is the major source of *phonological* errors, interference errors are only one of many types of errors found in the lexicon, syntax, morphology, and orthography of students' utterances in the target language (Wolfe, 1967; Falk, 1968; Wilkins, 1968; Dušková, 1969; Selinker, 1969; Buteau, 1970; Ervin-Tripp, 1970; Grauberg, 1971; Hussein, 1971; George, 1972; Politzer and Ramirez, 1973; Richards, 1973a, 1973b; Burt, 1975; Hanzeli, 1975; and Hendrickson, 1977b).

### Communicative Competence and the Value of Errors

Since the late 1960s studies in transformational-generative grammar, first language acquisition, and especially cognitive psychology have contributed to a trend away from audiolingualism and toward making language teaching more humanistic and less mechanistic. Foreign language teachers have begun to respond to this attitudinal change by examining the learning styles of their students and by stressing the use of language for communication. These new directions in language teaching are gradually changing the focus of foreign language learning objectives, instructional materials, and pedagogical strategies. Instead of expecting students to produce flawless sentences in a foreign language, for example, many of today's students are encouraged to *communicate* in the target language about things that matter to *them*. As Chastain wrote in 1971, "More important than error-free speech is the creation of an atmosphere in which the students want to talk" (p. 249).



This positive perspective toward second language errors is based partly upon analogy to the fact that children everywhere produce numerous errors while acquiring their first language—errors that their parents expect and accept as a natural and necessary part of child development. Many language educators propose that foreign language teachers also should expect many errors from their students, and should accept those errors as a natural phenomenon integral to the process of learning a second language. When teachers tolerate *some* student errors, students often feel more confident about using the target language than if *all* their errors are corrected. Teachers are reminded that people make mistakes when learning any new skill, but that people learn from their mistakes when they receive periodic, supportive feedback.

Not only do all language learners necessarily produce errors when they communicate, but systematic analyses of errors can provide useful insights into the processes of language acquisition. Because errors are signals that actual learning is taking place, they can indicate students' progress and success in language learning (Corder, 1967; Zydaitis, 1974; Lange, 1977; and Lantolf, 1977). Studying students' errors also has immediate practical applications for foreign language teachers (Corder, 1973, p. 265):

Errors provide feedback, they tell the teacher something about the effectiveness of his teach-

ing materials and his teaching techniques, and show him what parts of the syllabus he has been following have been inadequately learned or taught and need further attention. They enable him to decide whether he must devote more time to the item he has been working on. This is the day-to-day value of errors. But in terms of broader planning and with a new group of learners they provide the information for designing a remedial syllabus or a programme of reteaching.

To summarize, over the past three decades there has been a significant change in foreign language methodologies and materials. There has also been a shift in pedagogical focus from preventing errors to learning from errors—a fact that is reflected in George's (1972) statement that, "It is noteworthy that at the beginning of the sixties the word 'error' was associated with *correction*, at the end with *learning*" (p. 189). Education is becoming increasingly oriented toward meeting the needs and interests of individual learners. Many foreign language teachers already have responded to their students' needs by implementing innovative methods and materials that encourage creative self-expression and by not insisting on error-free communication. Furthermore, the results of many studies in first and second language acquisition have important implications for teaching foreign languages efficiently and for developing effective instructional materials.

## A REVIEW OF THE LITERATURE ON ERROR CORRECTION

A review of the literature on error correction in foreign language teaching reveals that (a) no current standards exist on whether, when, which, or how student errors should be corrected or who should correct them (Burt, 1975, p. 53), (b) there are few widely accepted linguistic criteria of grammatical and lexical correction in foreign language teaching (Robinson,

1971, p. 261), and (c) much of what has been published on error correction is speculative, and needs to be validated by a great deal of empirical experimentation (Hendrickson, 1977b, p. 17). Despite these limitations, a sufficient body of literature on error correction exists to merit a systematic review. The information reported herein addresses five fundamental questions:



1. Should learner errors be corrected?
2. If so, when should learner errors be corrected?
3. Which learner errors should be corrected?
4. How should learner errors be corrected?
5. Who should correct learner errors?

### Should Learner Errors Be Corrected?

Before correcting student errors, teachers need to consider whether the errors should be corrected at all, and, if so, why (Gorbet, 1974; p. 55). When students are not able to recognize their own errors, they need the assistance of someone more proficient in the language than they are (Corder, 1967; George, 1972; and Allwright, 1975). A recent survey on college students' attitudes toward error correction reveals that the students not only want to be corrected, but also they wish to be corrected more than teachers feel they should be (Cathcart and Olsen, 1976). All teachers probably provide some means of correcting oral and written errors, just as parents correct their children's errors in a natural language learning environment. Correcting learners' errors helps them discover the functions and limitations of the syntactical and lexical forms of the target language (Kennedy, 1973). Error correction is especially useful to *adult* second language learners because it helps them learn the exact environment in which to apply rules and discover the precise semantic range of lexical items (Krashen and Seliger, 1975).

### When Should Learner Errors Be Corrected?

Perhaps the most difficult challenge of language teaching is determining when to correct and when to ignore student errors (Gorbet, 1974, p. 19). The literature on error correction reveals clearly that many foreign language educators have rejected the obsessive concern

with error avoidance that generally characterizes audiolingually-oriented language instruction (Corder, 1967; Grittner, 1969; Chastain, 1971; Holley and King, 1971; George, 1972; Dresdner, 1973; Dulay, 1974; Gorbet, 1974; Burt, 1975; Krashen and Seliger, 1975; Valdman, 1975; Hendrickson, 1977b; Lange, 1977; Lantolf, 1977; Terrell, 1977). These educators hold that producing errors is a natural and necessary phenomenon in language learning, and they recommend that teachers accept a wide margin of deviance from so-called "standard" forms and structures of the target language.

There appears to be affective as well as cognitive justification for tolerating some errors produced by language learners. Foreign language educators generally agree that tolerating some oral and written errors helps learners communicate more confidently in a foreign language. Because language learners take many risks in producing incorrect utterances when communicating, teachers need to consider whether or not their corrective techniques instill a feeling of success in students. Perhaps teachers should reserve error correction for manipulative grammar practice, and should tolerate more errors during communicative practice (Birckbichler, 1977). A fairly recent survey of 1,200 university students of foreign language was conducted partly to determine their reactions to having their errors corrected by their teachers. It was found that the "students prefer not to be marked down for each minor speaking and writing error because this practice destroys their confidence and forces them to expend so much effort on details that they lose the overall ability to use language" (Walker, 1973, p. 103). In other words, the students who were surveyed believed that it was more important to communicate *successfully* in a foreign language rather than to try to communicate *perfectly* in it. Stressing the need to consider the "economics of intervention," George (1972) recommends that teachers initially determine how likely it is that correcting learners' errors will improve their



speech or written work, and how strongly the learners will sense their achievement. George suggests that drawing students' attention to every error they produce on their written compositions not only wastes time, but also it provides no guarantee that they will learn from their mistakes, as evidenced by similar errors that may reappear on their subsequent written work.

There has been little empirical evidence to suggest when to correct second language errors. More descriptive research is needed to determine the attitudes of students and teachers toward producing and correcting errors in the classroom. Experimental research should focus on the cognitive effects of error correction based on different levels of language proficiency and relevant personality factors such as willingness to take risks. For the present, teachers can consider which student errors should be corrected first and which ones should be allowed to remain uncorrected.

### Which Learner Errors Should Be Corrected?

An increasing number of foreign language educators suggest that errors that impede the intelligibility of a message should receive top priority for correction. Powell (1975b) analyzed speech samples collected in individual oral interviews of 223 American high school students at the end of their second year of French. She found that the greatest number of errors resulted from reduction, especially in tense markers. In sentences that were to be marked for tense or mood, students reduced the marker to the present indicative in at least 55 percent of the cases. According to Powell, "the fact that reductions seemed to be influenced by the need to communicate, suggests that correcting student errors in terms of their comprehensibility to a native speaker might result in a more advanced grammar" (p. 38). Elsewhere, she notes

that "if error correction by the teacher results in a more adult grammar, it is possible that correction in terms of communication requirements might be more fruitful than any other kind, since this seems to be important to students" (Powell, 1973, p. 91). She further suggests that error in word order is perhaps the most serious threat to the communication of a message in French (Powell, 1975a, p. 12).

Hanzeli (1975) agrees that errors that interfere with the meaning of a message should be corrected more promptly and systematically than any other. He adds, however, that teachers who are native speakers of the target language would have difficulty establishing standard criteria for distinguishing communicative errors from non-communicative errors, because these teachers often have learned to interpret their own students' "Pidgin" (p. 431). The problem of correcting student errors consistently according to their effect on the comprehensibility of students' messages, would be an even greater dilemma for teachers who are nonnative speakers of the target language (Powell, 1973, p. 92). George (1972) observes that learners will anticipate or correct their errors according to the response they expect from the person who is listening to them or who is reading their work. Although he endorses the priority of correcting communicative errors, George believes that teachers often overestimate the degree to which such errors impair communication. He hypothesizes that native speakers would be able to understand the majority of students' deviant sentences. Indeed, there is some empirical evidence to support this assumption. An experiment was conducted to determine which deviations in passive voice sentences produced by 240 adolescent Swedish learners would most likely be misinterpreted by native Englishmen. It was found that the Englishmen understood nearly 70 percent of the 1000 utterances, and that generally, semantic errors blocked communication more than syntactic ones (Olsson, 1972).

An attempt has been made to distinguish



communicative errors from non-communicative errors. Burt and Kiparsky (1972) classify students' second language errors into two distinct categories: those errors that cause a listener or reader to misunderstand a message or to consider a sentence incomprehensible (global errors), and those errors that do not significantly hinder communication of a sentence's message (local errors). On the basis of how errors affect the comprehensibility of whole sentences, one could build a local-to-global hierarchy of errors that would potentially guide teachers to correct students' mistakes (Burt, 1971; Burt and Kiparsky, 1972; Valdman, 1975). In an investigation on the effects of error correction treatments upon students' writing proficiency, this writer modified Burt and Kiparsky's global/local error distinction. He defined a *global* error as a communicative error that causes a proficient speaker of a foreign language either to misinterpret an oral or written message or to consider the message incomprehensible with the textual content of the error. On the other hand, a *local* error is a linguistic error that makes a form or structure in a sentence appear awkward but, nevertheless, causes a proficient speaker of a foreign language little or no difficulty in understanding the intended meaning of a sentence, given its contextual framework. It was found that most global errors included in compositions written by intermediate students of English as a second language resulted from inadequate lexical knowledge, misuse of prepositions and pronouns, and seriously misspelled lexical items. Most local errors were caused by misuse and omission of prepositions, lack of subject-verb agreement, misspelled words, and faulty lexical choice (Hendrickson, 1977b). Burt (1975) argues persuasively that the global/local distinction is the most pervasive criterion for determining the communicative importance of errors (p. 58). She claims that the correction of one global error in a sentence clarifies the intended message more than the correction of several local

errors in the same sentence (p. 62). Furthermore, she states that limiting correction to communicative errors allows students to increase their motivation and self-confidence toward learning the target language. Burt suggests that only when their production in the foreign language begins to become relatively free of communicative errors, should learners begin to concentrate on correcting local errors, if the learners are to approach near-native fluency (p. 58).

A number of language educators suggest that errors that stigmatize the learner from the perspective of native speakers should be among the first corrected (Johansson, 1973; Richards, 1973a; Sternglass, 1974; Corder, 1975; Hanzeli, 1975; Birckbichler, 1977). Undoubtedly, attitudes toward language influence human behavior. As Richards (1973a) points out, for example, "deviancy from grammatical or phonological norms of a speech community elicits evaluational reactions that may classify a person unfavorably" (p. 131). This hypothesis has been substantiated by a great deal of research on stereotyped judgments made on various features of Black English (Labov, 1972a, 1972b; Williams and Whitehead, 1973). Furthermore, sociolinguistic research in first language acquisition indicates that grammatical features tend to elicit more unfavorable reactions than phonological variables (Wolfram, 1973). This writer found several recent studies that relate to native speakers' reactions toward the errors of *second* language learners. In Guntermann's study (1977) thirty native speakers of Spanish listened to a tape recording of 43 sentences containing errors that American students most frequently produced on an oral test. The native informants were asked to interpret each sentence according to what they thought the speaker had meant to say. Of the 1290 interpretations given, 22 percent were inaccurate. The least comprehensible sentences were those containing multiple errors (32 percent misinterpreted), especially sentences that contained



multiple errors of the *same* subtype. It was found that among the highest frequency errors produced by American students of Spanish, errors in article omissions were more acceptable to native speakers than errors in article agreement. The results also revealed that person errors were generally less acceptable by native speakers than the other two categories, and tense errors were generally preferred. Another recent study on the acceptability of second language utterances was conducted by Ervin (1977) who investigated how proficient speakers of Russian would accept (i.e., comprehend) language communication strategies used by American students based on their oral narrations of picture stories. Although there were no statistically significant differences in the informants' rankings of the students, there were systematic differences in the judges' numerical evaluations: The non-teacher native speakers of Russian were most accepting of the narrations of the mid- and high-proficiency students; the teachers of Russian who were native speakers of English were most accepting of the narrations of low proficiency students; and the teachers of Russian who were native speakers of Russian were the least accepting of the narrations overall.

There are excellent social motivations for teachers' drawing their students' attention to errors that appear to have become a permanent rather than a transitional feature of nonnatives' speech and writing (Richards, 1973a; Valdman, 1975). These so-called "fossilized" errors should be corrected based on their degree of incomprehensibility and unacceptability as judged by native speakers. Clearly, a great deal of research is needed in these two important areas of sociolinguistics. Researchers need to investigate the degree of stigma that native speakers attach to lexically, grammatically, phonologically, and orthographically deviant forms and structures that nonnative learners produce frequently in their speech or writing. Moreover, it would be worthwhile to determine whether or not the degree of stigma would differ

depending on the social status of native speakers.

Several additional criteria have been suggested by language educators for establishing priorities of error correction. It has been suggested that high-frequency errors should be among the first errors that teachers should correct in students' oral and written communication (Holley and King, 1971; George, 1972, Dresdner, 1973; Bhatia, 1974; Allwright, 1975). Research is needed to determine which errors occur most frequently at various stages of second language learning among learners of varying native languages. The results of this research could serve as a basis for building hierarchies of language learning features; these hierarchies would have multiple applications including the establishment of priorities for correcting errors selectively and systematically. It has also been suggested that errors relevant to a specific pedagogic focus deserve to be corrected before other less important errors (Cohen, 1975), and that errors involving general grammatical rules are more deserving of attention than errors involving lexical exceptions (Johansson, 1973). Interestingly, language learners appear to have differing priorities of error correction than do language educators and teachers. Recently, a group of 188 college students was asked which errors they thought were the most important to correct. Students at all levels of proficiency agreed that pronunciation and grammar errors ranked highest, with pronunciation slightly higher than grammar errors (Cathcart and Olsen, 1976).

To sum up, there appears to be a consensus among many language educators that correcting three types of errors can be quite useful to second language learners: errors that impair communication significantly; errors that have highly stigmatizing effects on the listener or reader; and errors that occur frequently in students' speech and writing. A great deal more research needs to be conducted to determine the degree to which errors actually impede commu-



nication, which errors carry more social stigma than others, and which ones students produce often.

### How Should Learner Errors Be Corrected?

Teachers need to be keenly aware of how they correct student errors and to avoid using correction strategies that might embarrass or frustrate students (Holley and King, 1971). However, most teacher training programs fail to prepare teachers to handle the variety of errors that occur inevitably in students' speech and writing (Burt, 1975). Nevertheless, the literature on error correction does contain some information on recent theory, research, and practical suggestions for correcting students' errors.

Fanselow (1977) attempted to determine how experienced teachers of English as a second language actually treated spoken errors in their regular classes. After videotaping eleven teachers who presented the same lesson to their students, transcripts containing both verbal and nonverbal behaviors were made. The analysis of the tapes showed similarities among the teachers both in the types of errors treated and in the treatment used; specifically, the teachers seemed less concerned with errors of grammar than with incorrect meaning, and giving the right answer was the most popular treatment. The process of analysis led Fanselow to develop four alternative treatments to correcting students' spoken errors for the purpose of reducing students' uncertainty about how language works. Fanselow concludes that time spent on doing these kinds of feedback tasks in class "is probably at least as well spent as time spent giving answers alone," and that "errors are part of learning—mistaken hypotheses and wrong connections are normal" (p. 591). Chaudron (1977) developed a structural model for observing and describing the effectiveness of teachers' corrections of linguistic errors. The model enables teachers to analyze their own corrective

techniques and decide which of these are most effective in their classrooms. Robbins (1977) investigated the effectiveness of eliciting explanations of incorrect verb forms produced by students of English as a second language (ESL). Eight intermediate adult ESL learners were randomly placed into a control group or an experimental group. For one trimester the experimental subjects were given weekly error explanation sessions during which they attempted to locate their errors, correct them, and then were asked to provide an explanation for each error; the control group received other kinds of feedback on their errors. Robbins found that the experimental technique was ineffective in reducing the frequency of students' verb errors. She concluded that the technique appears to be dependent on external variables, such as a learner's attitude and motivation, personality, and past language learning history.

Many language teachers provide students with the correct form or structure of their written errors. Some foreign language educators assert, however, that this procedure is ineffective when helping students learn from their mistakes (Corder, 1967; Gorbet, 1974; Valdman, 1975). They propose that a *discovery* approach to error correction might help students to make inferences and formulate concepts about the target language, and to help them fix this information in their long-term memories. This writer conducted an experiment to determine what effects direct teacher correction would have upon foreign students' communicative and linguistic proficiency in English. He found that supplying the correct lexical forms and grammatical structures of students' errors had no statistically significant effect upon the writing proficiency of either high or low communicative groups of students (Hendrickson, 1976, 1977b).

There is some controversy on whether or not student errors should be corrected in some sort of systematic manner. Many teachers correct students' written work, for example, so imprecisely and inconsistently that it is often difficult for students to distinguish their major errors



from their minor ones (Allwright, 1975). Indeed, recent research indicates that a major reason that the correction of students' compositions has no significant effect on reducing errors, is that teachers correct compositions inconsistently. It was hypothesized, therefore, that a systematic approach to error correction would be more effective than random correction (Cohen and Robbins, 1976). Dulay and Burt (1977) see, however, no reason to expect significantly different results with systematic correction techniques. They propose that "more *selective* feedback, tailored to the learner's internal level of linguistic development, may be more effective" than systematic feedback (p. 108).<sup>2</sup>

Several scholars recommend that teachers record their students' errors on diagnostic charts in order to reveal the linguistic features that are causing students learning problems (Lee, 1957; Corder, 1973; Cohen, 1975; Cohen and Robbins, 1976). Recently, this writer used Burt and Kiparsky's global/local error distinction as a basis for developing an error taxonomy for classifying, coding, and charting students' oral and written errors systematically. The following error chart reveals one student's major problem areas based on the coding and tallying of his composition errors (Hendrickson, 1977a):<sup>3</sup>

	Lexicon	Syntax	Morphology	Orthography	Total
Global Errors	4			2	6
Local Errors	8	5	8	17	38
Problem Area(s)	Nouns 9	Prepositions 4	Plural markers 5	Omitted letters 8	

Error charts are useful not only for diagnostic purposes, but also for developing individualized instructional materials, for building a hierarchy of error correction priorities, and for learning more about the process of second language acquisition.

Recent literature in foreign language methodology contains several specific suggestions for

correcting students' oral errors. At the University of South Carolina pre-service teachers are given a partially self-instructional program designed to sensitize them to different types of oral errors and to involve them in dealing with these errors effectively. The error correction techniques "resemble the tactics of a parent who is trying to help a child express his ideas or those of one who is helping a foreigner communicate in a language which he knows imperfectly" (Joiner, 1975, p. 194). When the teacher cannot decipher a student's message it has been suggested that he "either reword the answer in an acceptable fashion, in such a manner as adults do with children, or at the end of the activity he may summarize and review the most common mistakes" (Chastain, 1971, p. 250). Another oral error correction method is to make tape recordings of student conversations; then each student edits his own tape for errors. If he does not recognize his mistakes, it may indicate that he has improperly learned the linguistic concepts at issue, and the teacher will then be responsible for formulating an appropriate corrective technique (Lantolf, 1977). Several suggestions have been given for teachers who use "The Silent Way" method developed by Gattegno. Silent teachers may respond to student oral errors in many ways, preferably those that conform to two principles: "(1) Remain silent if at all possible. (2) Give only as much help as absolutely necessary" (Stevick, 1976, p. 143).

The literature also contains some specific suggestions for correcting students' *written* errors. One suggestion is to first identify and record the error types that each learner produces frequently. Then, the student reads his or her written work to search out and correct all high-frequency errors, one such error type at a time. For example, if a learner's composition customarily lacks subject-verb agreement, the student is asked to read the composition in order to identify the subject of the first sentence. He then puts the index finger of his left hand on the subject, and moves the index finger of his right



hand until he has identified the verb, and checks for concord. After the student proceeds through the entire composition in this way, he reads it once again to check for other error types that he produces often. It is claimed that correcting errors in this way is a highly effective technique requiring relatively little time or effort on the part of the student (George, 1972, pp. 76-77). Another suggestion for correcting composition errors is to use different color inks for distinguishing more important errors from less important ones (Burt and Kipansky, 1977, p. 4). It has also been recommended that the teacher discuss each student's composition errors on cassette tapes, as a means of assuring that students will remember the comments (Farnsworth, 1974).

Currently, this writer uses a combination of various direct and indirect techniques to correct picture story compositions written by intermediate learners of Spanish. Some indirect techniques are underlining all misspelled words and omitted or superfluous affixes; placing a question mark above a confusing phrase or structure; and inserting an arrow (↑) to indicate a missing article or preposition. Generally, these indirect methods are used whenever it is assumed that students can correct their own errors using a good dictionary or grammar book. More direct correction techniques include underlining a word and providing a verbal tip such as "use subjunctive"; crossing out superfluous words; and supplying the correct form or structure—the most direct and least used technique. When students receive their corrected compositions, they rewrite them and turn them in at the next class session. The few errors that appear on the rewritten compositions are then corrected by supplying the correct form because it is assumed that students are not able to correct these errors by themselves. Thus far, these correction procedures have significantly improved students' expression of thought as well as their grammatical accuracy in Spanish. The procedures have also contributed to a considerable

increase of word output from the beginning to the end of each term.<sup>4</sup>

Finally, Wingfield (1975) points out that the teacher should choose corrective techniques that are most appropriate and most effective for individual students. He lists five techniques for correcting written errors (p. 311):

1. The teacher gives sufficient clues to enable self-correction to be made;
2. The teacher corrects the script;
3. The teacher deals with errors through marginal comments and footnotes;
4. The teacher explains orally to individual students;
5. The teacher uses the error as an illustration for a class explanation.

One educator concludes that any error correction process includes some of the following general features: indication that an error was committed, identification of the type of error, location of the error, mention of who made the error, selection of a remedy, provision of a correct model, the furnishing of an opportunity for a new attempt, indication of improvement (if applicable), and the offering of praise (Allwright, 1975).

Very few of the error correction theories and methods described above have been tested to determine their effect on facilitating second language proficiency. Clearly, there is a great need to conduct research that deals with this issue. It would be worthwhile, for example, to determine what native speakers do to facilitate communication with foreign learners in various types of free-learning situations, compared to what language teachers do in a classroom environment. Many other questions remain unanswered: What effects do correction in natural versus artificial settings have upon learners' language proficiency? Do native-speaking and nonnative-speaking teachers evaluate deviant speech and writing differently? If so, how do they correct students' errors, and how do students react to the different correction approaches?



### Who Should Correct Learner Errors?

Most classroom teachers probably assume the responsibility for correcting their students' errors. The teacher is expected to be a source of information about the target language and to react to errors whenever it seems appropriate to do so (Allwright, 1975). One educator believes that the teacher's function in error correction is "to provide data and examples, and where necessary to offer explanations and descriptions and, more importantly, verification of the learner's hypothesis (i.e., correction)" about the target language (Corder, 1973, p. 336).

While few language educators would deny the teacher an active role in correcting errors, it has been suggested that he or she should not *dominate* the correction procedures. One alternative approach to correcting *written* work is to ask students to correct one another's papers. Peer correction would especially help students recognize more grammatical errors than lexical errors; this process would be reversed when students correct each other's spoken errors (Cohen, 1975, p. 419). In other words, students would tend to focus on linguistic forms of sentences when correcting each other's compositions; but when they would correct one another's spoken utterances, the students would concentrate on function words such as nouns, verbs, adjectives, and adverbs. Students would also tend to correct each other's spelling and pronunciation, depending on the modality of communication. Several scholars agree that in a heterogenous class, one student will be able to recognize another's error, especially when the corrector has himself just overcome some gram-

matical or lexical problems (Burt and Kiparsky, 1972; Corder, 1975; Valdman, 1975). Recently Witbeck (1976) experimented with four peer correction strategies, including whole class correction, immediate feedback and rewriting, problem-solving, and correction of modified and duplicated essays. He concludes that peer correction results in a "greater concern for achieving accuracy in written expression in individual students and creates a better classroom atmosphere for teaching the correctional aspects of composition" (p. 325).

Several language specialists propose that once students are made aware of their errors, they may learn more from correcting their own errors than by having their teacher correct them (George, 1972; Corder, 1973; and Ravem, 1973). Self-correction would probably be effective with grammatical errors but would be relatively ineffective with lexical errors (Wingfield, 1975).

It is apparent that the effects of these different approaches to who should correct learners' errors are based more on intuition than experimental research. The effects of the various methodologies of error correction discussed above need to be substantiated or refuted by conducting a series of carefully controlled experiments before correction strategies can be recommended or rejected as being effective for dealing with students' written or oral errors. It may well be that the specific effects on a learner's language proficiency in terms of *who* corrects his errors will depend upon *when* they are corrected, *which* ones are corrected, and especially *how* they are brought to the learner's attention.

### SUMMARY

The literature on the correction of second language errors is quite speculative and relatively scant. Nevertheless, some general and specific implications for error correction can be drawn from the information reported herein.

The following implications respond directly to questions concerning whether, when, which, how, and by whom the student errors should be corrected.

1. It appears that correcting oral and written



errors produced by second language learners improves their proficiency in a foreign language more so than if their errors would remain uncorrected.

2. There appears to be no general consensus among language methodologists or teachers on when to correct student errors. Many language educators recognize, however, that correcting every error is counter-productive to learning a foreign language. Therefore, teachers need to create a supportive classroom environment in which their students can feel confident about expressing their ideas and feelings freely without suffering the threat or embarrassment of having each one of their oral or written errors corrected.

3. The question of when to correct student errors is closely related to which errors to correct. Many educators propose that some errors have higher priorities for correction than other errors, such as errors that seriously impair communication, errors that have stigmatizing effects upon the listener or reader, and errors that students produce frequently. Procedures for classifying and coding specific error types are being developed for purposes of building a

hierarchy of error correction; one error taxonomy has already been developed to classify errors in communicative terms.

4. The literature reveals a wide variety of techniques that teachers currently use to correct their students' oral and written errors. Although there is no experimental evidence to substantiate whether any of these methods reduces student errors significantly, some empirical research indicates that *direct* types of corrective procedures have proven to be ineffective. Some very recent research has focused on how teachers actually correct student errors in their classrooms. It appears that continued research in this new area will contribute to the development of additional practical methods for correcting errors effectively and efficiently.

5. Although teacher correction of learner errors is helpful to many students, it may not necessarily be an effective instructional strategy for every student or in all language classrooms. Peer correction or self-correction with teacher guidance may be a more worthwhile investment of time and effort for some teachers and learners. However, no empirical research was found to substantiate these hypotheses.

## NOTES

1. The definition of an "error," a word derived from Latin *errare* meaning "to wander, roam or stray," depends on its use for a particular purpose or objective. For the purpose of a discussion on error correction in foreign language teaching, this writer defines an error as an utterance, form, or structure that a particular language teacher deems unacceptable because of its inappropriate use or its absence in real-life discourse.

2. Interestingly, several researchers have found that second language errors appear to occur systematically in students' written work. Dušková (1969), for example, found that 75.1 percent of the errors in the written assignments of Czech university students studying English as foreign language were systematic. More recently, Ghadessy (1976) discovered that 77.3 percent of the writings of 370 Iranian university freshmen learning English contained systematic errors most of which were caused by the lack of reducing sentences by either conjunction or embedding (p. 80). Ghadessy concludes that because the majority of student written errors occur in systematic patterns, these patterns could serve as a basis for developing instructional materials for individual learners (p. 81). Although written errors produced by second language learners may occur systematically, there is no experimental evidence to suggest that they should be *corrected* systematically.

3. The writer has recently modified this taxonomy so that teachers can evaluate the



quantity and quality of information in students' communication samples using an error analysis approach.

4. An unexpected finding in a study conducted by the author was the substantial increase (30 percent) in the number of words that students wrote on their composition pretests compared to the number of words they wrote on identical composition post-tests after six weeks of practice describing picture stories in writing (Hendrickson, 1977b). It may be that writing practice, improvement in writing proficiency, self confidence in one's own writing ability, and total word output are closely related variables.

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## Functions

The following is a list of some of the most important functions a foreigner might need when speaking English. When writing dialogues around these functions, don't make your language too informal or too formal. An example of the first one is given.

### 1 Starting a conversation.

A: Oh hello, how are you?  
B: Fine thanks, and you?  
A: Very well, thank you.  
B: Terrible day, isn't it?  
A: Yes, horrible, isn't it.

### 2 Inviting people

*Would you like to...? I'd love to. That'd be nice.*

### 3 Making suggestions

*Let's... Why don't we...? What about ...ing? That's a good idea.*

### 4 Making a plan together

*Shall we...? Why don't we...? What a good idea.*

### 5 Asking for help

*Excuse me, could you...? Would you...? Please. Certainly.*

### 6 Asking for, giving and refusing permission

*Do you mind if I...? Not at all. May I...? Certainly. I'd rather you didn't...*

### 7 Asking for and giving advice

*What do you think I should do? Do you think it's a good idea? If I were you I'd...  
Have you thought of...? Why don't you...?*

### 8 Agreeing and disagreeing (informal)

*What did you think of...? That's exactly what I thought.  
Well, actually, I thought it was...*

### 9 Agreeing and disagreeing (more formal)

*I agree with you completely. I really can't agree with that.*

### 10 Asking for and offering things

*Could I have a... please? I'd like a... Would you like a...? Yes please.  
No, thank you.*

### 11 Asking for and giving directions

*Excuse me, I wonder if you could tell me the way to... please. Go straight along ...  
down up ... turn right ... turn left ... take the second on the right ... it's on the left  
... opposite the ... You can't miss it. I'm sorry, I'm a stranger here myself.*

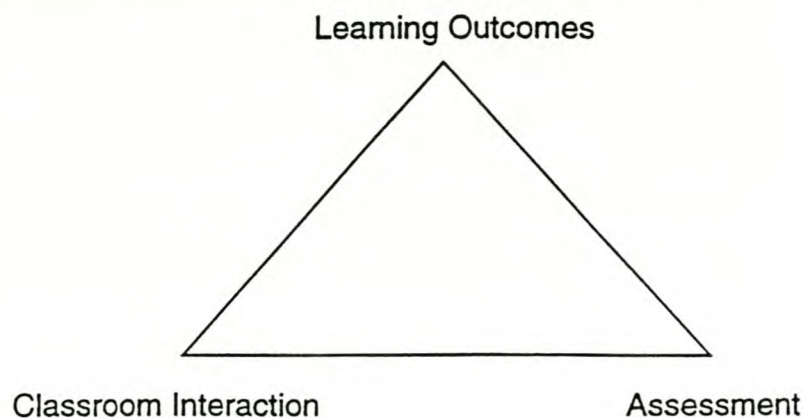


**LEARNER ERRORS AND ERROR ANALYSIS**  
(ELLIS, 1994)

## Section 2 The Curriculum

One of the problems we are faced with in writing a guide like this is that we have to turn knowledge into something quite linear when in real life it is not linear. Basically we have presented the course in defined pieces that follow one after the other in a straight line. In reality one cannot separate everything like we have done in this guide and so just by writing we are distorting. We are telling you this for a specific purpose and that is that you need to try to integrate the parts into a relatable whole.

In each of the learning areas that we teach, we will be concerned at the moment with the job of deciding on the curriculum of that learning area and how it relates to the total curriculum of the school. We need to look very closely and develop a working knowledge of the relationship that exists between key aspects of the curriculum of our own teaching subject. The **Learning Outcomes**, the **Classroom Interaction** and the **Assessment** we use are all related to each other. We can represent the curriculum of our subject in any of the teaching phases by a triangle, at the points of which we find these three aspects.



By **Learning Outcomes** we mean the goals that must be achieved by a learner in that grade. By **Classroom Interaction** we mean the way in which we teach, and the way in which the classroom provides opportunity for learners to learn the knowledge and skills that they require to meet the Learning Outcomes of that grade. By **Assessment** we mean the ways in which we assess whether or not the learners have



achieved the Learning Outcomes - that is, learner assessment, as well as whether or not the course has been effective in enabling learners to demonstrate the desired outcomes - that is, course evaluation.

Already it is possible to see that any decisions about one aspect will affect the other two aspects, or looking at the relationship between any two aspects will have implications for the third aspect.

If we focus on the relationship of **Learning Outcomes** and **Classroom interaction** we will see that if we hope to achieve the learning outcomes identified for the course we will have to make our teaching methodology, that is the way we teach, supportive of the learners developing relevant skills. For example, say that a learning outcome for science is that learners will be able to relate scientific concepts to their everyday lives. In a particular classroom the teacher lectures the concept and does not let the learners discuss how they understand the concept. The learners may develop skills at listening, but with this teaching style, they will not develop the ability to relate new knowledge to their everyday lives.

When we look at the relationship between **Learning Outcomes** and **Assessment** we see that if we want to measure whether learners have achieved the outcomes of the course, we have to set tasks to assess the development of that outcome in the learner. For example, if a learning outcome is that learners must develop skills at working together in groups, then one of the ways in which we assess learners will be to formulate some task in which we can measure the development of group work skills.

When we look at the third relationship, that of **Assessment** and **Classroom Interaction**, we see that if we wish to achieve valid learner assessment we have to assess learners on skills that they have had the opportunity of developing in the classroom situation. For example, we should not use multiple choice questions to test our learners' knowledge of some content if we have not given learners the opportunity in the classroom to learn about how to answer multiple choice questions.

In all three relationships described above, as we adjust one aspect and make it fit better with a second aspect, it will have implications for the third aspect. For example, if we rethink the way we organize our classroom interaction so that we give opportunities for learners to develop a wider range of skills that are required by the set of learning outcomes, we will find that we are obliged also to make adjustments to the kind and amount of assessment we use.

Likewise, if we are obliged to think more pro-actively about the kinds of learning outcomes that our courses are going to have in the future, then identifying the Learning Outcomes for a course will immediately mean a rethinking about the assessment and Classroom Interaction practices that we will be able to use.

Outcomes Based Education (OBE) is a cornerstone of Curriculum 2005. All teachers are having to do a lot of thinking to orientate themselves to viewing the curriculum in a new way, or from a different perspective. The triangle that we have described and explained above is an easy way to start, and continue thinking about OBE.



## Activity 2 Analysis

Look at the pictures below and for each one decide what you think the learners are learning apart from the subject content.



## Section 3 Classroom interaction

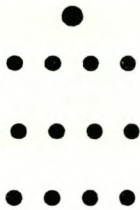
Q What is meant by classroom interaction?

When we talk about classroom interaction, we mean all the ways in which we arrange communication in the classroom. Teachers need to reflect on whether they are creating sufficient opportunities for their learners to think and talk about what they are learning, and in so doing facilitating cognitive and language growth.

### Activity 3 Reflection on experience

Look at the interaction patterns below. In your workbook answer the questions that follow on the next page.

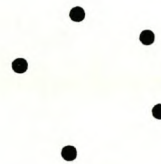
1.



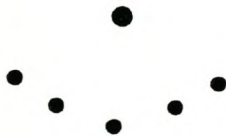
2.



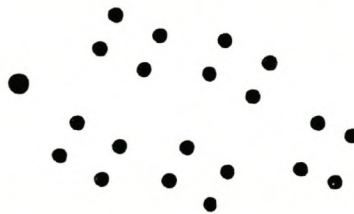
3.



4.



5.





You may have noticed that the learners are learning a lot about how to interact with each other over knowledge. This not only makes them communicatively competent which prepares them for the world of work, it also means they are learning a great deal about where knowledge comes from and how it is made. If content is taught without integrating processes and learning skills into it, then learners will come away without these skills and processes.

Teachers shape the curriculum with their beliefs, their conceptions of knowledge, their expectations of the learners, and their perceptions of the school and the community. This means that if teachers want to construct a rich learning environment that facilitates language and cognitive development they need to reflect on their practice as individuals and, ideally, as part of a co-operative team of teachers. It is most powerful when teachers work together in a school, reading and talking to each other about how to shape the curriculum, under good leadership. However, you, as an individual, can introduce practices into your classroom that will change your learners' experience of knowledge and learning.

**APPENDIX C**

**QUESTIONNAIRE**



**UNIVERSITY OF STELLENBOSCH**  
**FACULTY OF EDUCATION**  
**DEPARTMENT OF DIDACTICS**

**THE RESEARCH QUESTIONNAIRE IN CO-  
OPERATIVE LEARNING**

**INSTRUCTIONS:**

Kindly complete this questionnaire as a follow-up activity to the practical activities you participated in co-operative learning. The research objectives will only be achieved with your co-operation.

**AIMS OF THE RESEARCH:**

- To collect information related to effects of co-operative learning in oral English
- To collect data on your perceptions of co-operative learning.
- To provide higher education institutions including Madadeni College of Education with an alternative learning approach that may result in effective learning and teaching.

All completed sets of questionnaire to be returned to:

Mr. HK Khumalo

Contact numbers: Room 59, Administration Block

03431 - 92004/5 (W)

03431 - 27574 (H)

## **CO-OPERATIVE LEARNING IN ENGLISH AS A SECOND LANGUAGE**

1. The questionnaire consists of 9 pages. Most questions that are asked are simple and there are no wrong or right answers.
2. The questionnaire should not take longer than forty minutes to complete.
3. All students who have been involved in practical co-operative activities are to complete this questionnaire
4. Please indicate by an X if you have been requested to do so. Should you encounter any problem, please raise your hand.
5. This questionnaire has been constructed for research purposes only therefore do not write your name or indicate the section of your class.
6. As you took part in practical activities in co-operative learning try and be as honest as you can when answering questions as your answer will inform this research.
7. Do not ask possible answers from your friend or ask for his/her assistance.
8. When you have finished please indicate by raising your hand. The completed questionnaire will be collected immediately.



## 1. BIOGRAPHICAL INFORMATION

Kindly indicate by an (X) in the appropriate block. Please supply the following details. Remember there are **NO WRONG OR RIGHT** answers. Do not write your name.

1.1 Class

PTD (Senior)	1
--------------	---

1.2 Year of Study:

Third Year	1
------------	---

1.3 Gender:

Male	1
Female	2

1.4 Age group

19 to 24 years	1
25 to 30 years	2
31 to 36 years	3

## 2. YOUR PERSONAL FEELINGS

2.1 How did you feel about your performance when you received your results of the first individually done test?

Very Excited	1
Excited	2
Mixed Feelings	3
Bad	4
Very Bad	5
I don't know	6

2.2 When you did the first individual oral test before you participated in co-operative learning each student had to work alone. **Please indicate your score in the individual test by placing an [x] in the appropriate block.**

Above Average	1
Average	2
Below Average	3
Not sure	4

2.3 How do your co-operative results compare with the individual oral test you did before you participated in co-operative learning activities? **Please indicate our choice with a cross [X] in an appropriate space.**

Have Improved	1
Have Improved Slightly	2
All students get fair scores	3
No difference	4
No one competes	5
Not certain	6

2.4 Co-operative learning can be used as an alternative learning approach in Higher Education. **Please make a cross [X] in an appropriate block.**

Strongly Agree	1
Agree	2
Neutral	3
Disagree	4
Strongly Disagree	5

2.5 Lecturer-centred learning. When the lecturer, English students sit and listen. **Please make a cross [X] in an appropriate block.**

Strongly Agree	1
Agree	2
Neutral	3
Disagree	4
Strongly Disagree	5



- 2.6 Choose one role that was played by the lecturer while you were participating in co-operative learning activities. **Please make a cross [X] in an appropriate block.**

Supervisor	1
Manager	2
Agitator	3
Facilitator	4

- 2.7 You were given a role to play by your group. What role were you involved in? **Please make a cross [X] in an appropriate block.**

Researcher	1
Encourager	2
Recorder	3
Presenter	4

### 3. CO-OPERATIVE LEARNING IN ENGLISH AS A SECOND LANGUAGE

- 3.1 What do you think is the purpose of engaging in co-operative learning activities? **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. To share ideas as student teachers	1	2
2. To learn to discuss in groups	1	2
3. To share ideas and learn from each other	1	2
4. Other (please specify)	1	2

**3.2** What are your personal opinions about the use of co-operative learning at College leave? **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. Co-operative learning helps improve quality of argument	1	2
2. Helps student teachers to be able to speak to friends	1	2
3. Student teachers learn and can apply co-operative learning skills in their school classrooms when they qualify	1	2
4. Other (please specify)	1	2

**3.3** When you engage in co-operative learning activities some members in your learning group participated differently. **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. Some group members showed no interest	1	2
2. One member of the group dominated by wanting to talk more	1	2
3. All group members gave one another an opportunity to talk	1	2
4. Other (please specify)	1	2

**3.4** Definition of co-operative learning. What do you think co-operative learning means? **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. Students are grouped together to discuss given material	1	2
2. Instructional use of small groups so that students discuss together and accomplish shared goals	1	2
3. Uncertain	1	2
4. Other (please specify)	1	2



3.5 The use of co-operative learning when you qualify as a teacher. Co-operative learning should be used in school because: **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. It provides opportunity for students to improve their oral communication	1	2
2. It gives the lecturer/facilitator an opportunity to know his/her students' oral progress	1	2
3. Naturally reserved students become comfortable when they discuss learning material among themselves	1	2
4. Other (please specify)	1	2

3.6 What problems did you encounter when you were engaged in active co-operative learning activities? **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. Some fellow student group members did not participate actively	1	2
2. Learning material was not well explained by the facilitator	1	2
3. There is no effective learning when students are doing work themselves	1	2
4. There is log of time spent preparing and discussing learning material	1	2
5. Other (please specify)	1	2

3.7 Presentation by a presenter. The presentation made by a presenter indicated that he/she was not presenting his/her own ideas. **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. The presenter presented his/her own ideas from the learning material	1	2
2. The presenter resented ideas discussed, agreed upon and shared by all co-operative learning group members	1	2
3. The presenter did present his ideas shared by all co-operative learning groups	1	2
4. Other (please specify)	1	2



- 3.8** Discussion of learning material for presentation. During the discussion time the researcher, as the leader of co-operative groups involved all group members. **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. He/she involved all members of the group	1	2
2. He/she concentrated on those who are talkative	1	2
3.He/she encouraged everybody to participate in discussions	1	2
4. Other (please specify)	1	2

- 3.9** Discussion of learning material for presentation. During the discussion time the researcher, as the leader of co-operative groups involved all group members. **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. He/she involved all members of the group	1	2
2. He/she concentrated on those who are talkative	1	2
3.He/she encouraged everybody to participate in discussions	1	2
4. Other (please specify)	1	2

#### **4. POST CO-OPERATIVE LEARNING ACTIVITIES**

- 4.1** Participation in learning activities **Please answer YES or NO for each statement below.** *After the facilitator explained what co-operative learning meant:*

QUESTIONS	YES	NO
1. I participated with confidence	1	2
2. I learning material without problem	1	2
3. I studied all learnt material with ease	1	2
4. Other (please specify)	1	2



4.2 Co-operative learning test results. The results of the co-operative learning test were pleasing because they reflected every member of the group's effort. **Please answer YES or NO for each statement below.**

QUESTIONS	YES	NO
1. Test results are a true reflection of what happens in equal co-operative learning group discussions.	1	2
2. Nobody competes to score higher marks than others	1	2
3. All group members feel responsible for their own learning	1	2
4. Other (please specify)	1	2

Thank you for your co-operation

HK Khumalo