Dialogue Teaching for ELT Undergraduate Students’ Speaking Skills

A Case Study of Al-Fashir University

A Thesis Submitted for the Degree of Ph.D in English Language Teaching (ELT).

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Dedication

. . . To the soul of my parents
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The writing of this thesis would not have been possible without the support and help of many people, whom I am truly indebted to in one way or another. Though, I would like to mention everyone by name, but that may not be possible in these pages provided here.

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Abstract

There has been a great deal of recent interest among methodologists in a creative method that leads to an interactive classroom teaching and learning. As a result of a number of studies, a dialogic pedagogy was found and it was known as dialogic teaching. The current study aims to investigate dialogic teaching for ELT undergraduate students’ speaking skills. To collect data for the study, three tools has been used; a questionnaire, an interview and an observational checklist. The questionnaire is distributed to the students of second, third and fourth year who have been selected from different Sudanese universities. Observational check list is used for two groups of respondents: Group (A) control group: consisted of 20 students at 3rd year. Group (B) Experimental Group: Also consisted of 20 students at 3rd year (semester 6). The forty students are from Al-Fashir University. Interviews are used with 40 English Language lecturers, assistant professors, and professors from different Sudanese Universities.

The collected data has been analyzed quantitatively and qualitatively. Analysis of the questionnaire has shown that the majority of the respondents (85%) are either (agree 45%) or (strongly agree 40%) that using the technique of dialogue in teaching provides learners with opportunity to share ideas. It has been found that dialogic teaching components are effective if students are given enough time to practice these skills. Moreover, some interviewees think that that dialogue skills and questioning skills are the most effective and applicable in the classroom.
مستخلص البحث

Arabic Version

لمسَات عديدة، كان هناك قدر كبير من الاهتمام في الأونة الأخيرة بين علماء الطرق التدريس في إيجاد طريقة مبتكرة تؤدي إلى التدريس والتعلم التفاعلي في قاعة الدراسة. نتيجةً لعدد من الدراسات، تم ابتكار طريقة تدريسية سليمة بالتدريس الحواري؛ تهدف الدراسة الحالية إلى التعرف على تأثير التدريس الحواري في تطوير مهارات الكلام والتفكير لدى المتعلمين. مع البيانات للدراسة، استخدمت ثلاث أدوات كانت هي الإستبانة، المقابلة والملحوظة. تم توزيع الاستبانة على طلاب دورة الثانية والثالثة والرابعة الذين اختيارهم من جامعات سودانية مختلفة. تم استخدام قائمة التدقيق من الملاحظة لمجموعتين من المستجيبين:

المجموعة (أ) الضابطة شهد 20 طالبًا في كل من ثالث، ثانية، وثالثة السنة. الطلاب الأربعة كانوا من جامعة الفاشر. استخدمت المقابلات مع 40 من أعضاء التدريس في قسم اللغة الإنجليزية من حاضرين، أساتذة مساعدة من الجامعات السودانية المختلفة. وقد تم تحليل البيانات التي تم جمعها با ونوعها. وقد أظهر تحليل البيانات أن التدريس الحواري يمكن الطلاب من تنمية مهارات التفكير والحوار والمناقشة التي تسهم في تطوير مهاراتهم في التفكير والتحدث. وقد تبين أن مكونات التدريس الحواري فعالة إذا تم إعطاء الطلاب ما يكفي من الوقت لممارسة هذه المهارات. علامة على ذلك، يمكن لهذه المهارات أن تكون فعالة إذا كانت تمارسة حقيقية.
Definition of terms

1. Dialogic teaching: dialogic teaching is an approach to teaching which in a highly disciplined fashion harnesses the power of speaking to stimulate and extend learners’ thinking and advance their learning and understanding.

2. Classroom speaking: is a type of dialogic teaching activity by which the teacher engages learners.

3. Effective questioning: it is an activity which is used by the teacher to develop learners’ thinking.

4. Debate: is an activity carried out to defend one’s views and assumptions.

5. Argumentation: providing a reason or reasons why someone supports or opposes an idea or suggestion, or the process of explaining them.

6. Discussion: an activity which entails the open exchange of views and information in order to explore issues, test ideas and tackle problems.
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Chapter One
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1.1 Background of the study

University students encounter difficulties to express themselves comfortably and efficiently either when dealing with academic topics or common everyday topics. The way out of this problem is adopting dialogic teaching method which is considered to be the educative potential of teacher – student interaction that enables students to play active part in shaping the topics of classroom discourse. Dialogic teaching which is collective, reciprocal, cumulative, stresses the potential of collaborative, group work and peer assistance to promote mutually responsive learning in the zone of proximal development.

Whatever kinds of teaching and learning are on offer, and however the interaction is organized, teaching is more likely to be dialogic if it meets the following principles:

- Collective: teachers and learners address learning tasks together, whether as a group or a class.
- Reciprocal: teachers and learners listen to each other, share ideas and consider alternative viewpoints.
- Cumulative: teachers and learners build on their own and each others’ contributions and chain them into coherent lines of thinking and understanding.
- Purposeful: classroom talk, though open and dialogic, is also planned and structured and specific learning. (Alexander:2008:4)

Dialogic teaching emphasis is on the importance of maximising active student participation in classroom talk as a means of enhancing understanding. Like all good teaching, dialogic teaching is grounded in evidence and principles and it draws on a broad repertoire of strategies.
and techniques. The teacher draws on this repertoire in response to different educational purposes and contexts, the need of different students, and the diverse character of what is to be taught and learned. Dialogic teaching was identified and described by eminent educational researcher Robin Alexander, based on analysis of his detailed observations of classroom life:

“Dialogic teaching deals not just with what is to be learned, but how. It explores the learners’ thought”.

(Alexander: 2006:35)

Many writers have stated that certain patterns of interaction—exploratory talk, argumentation and dialogue—promote high level of thinking and intellectual development through their capacity to involve learners in joint acts of meaning-making and knowledge construction. Dialogic pedagogy plays a role in shaping thinking and securing learners’ engagement, learning and understanding. Another fact is that talk is considered to be central to the learning process, enabling students to become productive, more adept at using language so they can express their thoughts and engage with others in joint intellectual activity to develop their communication skills and to advance their individual capacity for rational and reflective thinking.

Dialogic teaching harnesses the power of talk to stimulate and extend learners’ thinking and advance their learning and understanding. Dialogic teaching is an approach and a professional outlook rather than a specific method. It requires teachers to rethink not just the techniques they use but also the classroom relationships they foster, the balance of power between teacher and what she/he taught and the way they conceive knowledge. In order to harness the power of talk to engage learners, stimulate and extend their thinking, dialogic teaching requires particularly close attention to:
• The different contexts of talk - whole class, collective (teacher-led) group, collaborative (student-led) group, individual;
• The purpose of questions (e.g. elicitation, recall, instruction, management, routine, probing) and their structure (e.g. closed, open, directive, leading, narrow, discursive);
• The form of answers (e.g. factual, analytical, speculative, hypothesizing, evaluative, and their length);
• The feedback which answers receive (e.g. evaluative, motivational, diagnostic, neutral);
• The length of exchanges;
• Roles and procedures for student-student discussion;
• Classroom climate and relationships;
• Classroom organization and layout;
• Lesson planning and structure;
• The teacher subject knowledge needed for extended exchanges;
• Ground rules governing the effective conduct of dialogic talk in classroom settings (attending, listening, speaking, loudly and clearly, respecting alternative viewpoints, etc). (Miliband:2003:3)

Teaching for thinking is one of the purposes of dialogic teaching. There has been a growing interest in recent years in teaching for thinking. This interest has been fed by new knowledge about how the brain works and how people learn, and evidence that specific interventions improve children’s thinking and intelligence. The particular way in which people apply their minds to solving problems are called thinking skills. These thinking skills are said to be essential to effective learning. To achieve this learning outcome, dialogic teaching uses learners’ talk to develop
their thinking. Particularly, effective questioning is used to advance learners’ thinking.

Historically, teachers have asked questions to check what has been learned and understood, to help them gauge whether to further review previous learning, increase or decrease the challenge, and assess whether learners are ready to move forward and learn new information. Currently, effective questioning as a dialogic teaching technique is used by teachers to invite students to think and to invite silent learners to response. Teachers also use this technique to promote learning, develop creative thinking, and pitch challenge.

It has been stated by Dawes (2008) that the change towards dialogic teaching can be a personal goal. The benefits for learners as individuals, for the class as a unit, for everyone who is learning and for our own job satisfaction are evident. Listening to learners discussing their ideas in ways that help them make meaning together, and showing them how best to use their minds and their spoken language, are all reasons why enlist as teachers in the first place. Dialogic teaching, as its name says quite clearly, is the responsibility of the teacher. Its outcomes for teachers include finding out what learners really think and being able to teach them what they need to know, honestly and clearly and enables them to engage their learners in an active classroom interaction. Its outcomes for learners are deeper engagement with learning, and a better understanding of how and why they should talk with everyone in their class. (p. 77)

1.2. Statement of the research problem

Throughout his work as an English lecturer for more than ten years in University of El-Fasher, the researcher has noticed that most of the students of English as a major subject encounter great difficulties to participate effectively during the lectures. They also suffer to think
critically. In order to contribute to solving this problem, the researcher tends to carry out this study to investigate the role of dialogic teaching in promoting learners’ speaking skills and thinking.

1.3. Objectives of the study

The present study is aiming to achieve the following objectives:

1. To investigate the role of dialogic teaching in developing learners’ speaking and thinking to create active classroom interaction.
2. To explain the role of dialogic teaching in engaging learners through the medium of speaking.
3. To find out whether the skills of dialogue, debate, argumentation and questioning can be achieved by the learners through dialogic teaching.

1.4. Significance of the study

The benefits of adopting a dialogic approach to teaching are manifest. The learners know that their ideas are respected and valued when they listen to one another, suggest changes and help each other. They also learn that when something is difficult, they have the chance to learn something new, and that they will have a great sense of achievement when they persisted to find together a way through the difficulty. So dialogic teaching and talk give learners the opportunity to extend their talk and their thinking as it has been stated by Alexander (2003) that “a purposeful and productive dialogue where questions, answers, feedback progressively build into coherent and expanding chains of inquiry and understanding”.

On the other hand, by engaging learners in dialogic talk, teachers will be able to elicit learners’ ideas and help them grasp new concepts and new ways to describe their thoughts. Moreover, teachers will promote creative thinking by using dialogic teaching. As for the concerned institutions, dialogic approach will enable them to set a dialogic
curriculum to achieve effective classroom interaction and creative thinking.

1.5. Questions of the study

This study is an attempt to answer the following questions:

1. How can dialogic teaching develop the learners’
   a) Dialogue skills?
   b) Thinking?
   c) Debate skills?
   d) Argumentative skills?
   e) Questioning skills?

2. Which is the most effective component of dialogic teaching?

1.6. The hypothesis of the study

This study is intended to test the following hypotheses:

1. Dialogical teaching develops learners’ speaking and thinking.
2. Dialogic teaching enhances learners’ debating skills?
3. The skills of questioning and argumentation can be developed through dialogic teaching.
4. One of the four components of dialogic teaching is expected to be the most effective.

1.7. Research Methodology

1.7.1 Research Method

The method that will be applied in this study is the analytical descriptive method. The data for the phenomena under investigation will be collected by using the designed instruments to be analyzed statistically.

1.7.2 Data Collection Instrument

The main instruments will be used to collect data for the present study are a questionnaire which is designed for students from different universities in the centre who had been trained in debate skills and an
observational check list will be prepared for English language majors in advanced level who will be selected from the college of Art and college of Education in University of Al-Fashir. The researcher will also design an interview to be conducted with lecturers in English departments in a number of universities to test the effectiveness of this dialogical pedagogy.

1.7.3 The population and the sample of the study

Teachers of English in some Sudanese Universities represent the population and the sample of the study. English language majors from the College of Art and College of Education represent the population of the study. English language majors in semester six from the previously mentioned colleges will be treated as the sample of the study. Students who had been trained in debate skills from a number of universities who accepted to respond to the questionnaire will be considered the sample of the study.

1.8. Limitation of the study

This study will be conducted in University of Al-Fashir where English Language Majors in semester six from the college of Art and college of Education will be selected as the participants of the study.
Chapter Two
Literature Review
Chapter Two
Literature Review

This chapter consists of three sections. The first section clarifies the concept of dialogic teaching through the explanations and definitions provided by many writers for the term “dialogic teaching”. The second section displays the components of dialogic teaching such as argumentation, debate, effective questioning and dialogue. Particularly, the third section deals with the indicators that enable teachers to recognize that their teaching is dialogic.

2.1 What is dialogic teaching?

Empirical classroom research for the last three decades has shown that discourse patterns are monologue, controlled and shaped by the teacher. Therefore, to maximize active participation, and develop learners’ understanding, there needs to be a significant shift in classroom practice which in turn leads to a new trend in teaching. Many linguists call for adopting a pedagogy that engage learners and advance their understanding. This pedagogy is referred to as dialogic teaching. Dialogic teaching is explained by Alexander (2006, p.62) as finding out what learners think, engaging with their developing ideas and helping them to talk through innovative activities. Dialogic teaching can be thought of as combinations of various conditions that build up into a recognizable teaching approach. "Dialogic Teaching" means using talk most effectively for carrying out teaching and learning. Dialogic teaching involves ongoing talk between teacher and students, not just teacher-presentation.

Dialogic teaching is as distinct from the question-answer and listen-tell routines of traditional and so-called ‘interactive’ teaching as it is from the casual conversation of informal discussion. Nor should it be confused
with the official use in England of the term ‘Speaking and Listening’, since this attends only to the learner’s talk and is viewed as an aspect of English teaching, whereas dialogic teaching is as much about the teacher as the learner, and relates to teaching across the curriculum. Grounded in the principles of collectivistic, reciprocity, support, cumulating and purposefulness, dialogic teaching draws on recent psychological and neuroscientific research on children’s development and cognition as well as on a long tradition of observational and process-product research on teaching. The approach links with the work of Bakhtin, Bruner, Cazden, Barnes, Mercer, Nystrand, Wells and Wood and with new developments in cultural psychology and activity theory. Dialogic teaching has been intensively trialled in London, Yorkshire and other parts of Britain. Practicing dialogic teaching according to Alexander (2005, p.6) is based on the six pedagogical values which start with the purposes of education, the nature of knowledge and the relationship of teacher and learner:

- Teaching as transmission sees education primarily as a process of instructing children to absorb, replicate and apply basic information and skills.
- Teaching as initiation sees education as the means of providing access to, and passing on from one generation to the next, the culture’s stock of high-status knowledge, for example in literature, the arts, humanities and the sciences.
- Teaching as negotiation reflects the Deweyan idea that teachers and students jointly create knowledge and understanding rather than relate to one another as authoritative source of knowledge and its passive recipient.
- Teaching as facilitation guides the teacher by principles which are developmental (and, more specifically, Piagetian) rather than cultural or epistemological. The teacher respects and nurtures
individual differences, and waits until children are ready to move on instead of pressing them to do so.

Teaching as acceleration, in contrast, implements the Vygotskian principle that education is planned and guided acculturation rather than facilitated ‘natural’ development, and indeed that the teacher seeks to outpace development rather than follow it.

Teaching as technique, finally, is relatively neutral in its stance on society, knowledge and the child. Here the important issue is the efficiency of teaching regardless of the context of values, and to that end imperatives like structure, economic use of time and space, carefully graduated tasks, regular assessment and clear feedback are more pressing than ideas such as democracy, autonomy, development or the disciplines.

**Dialogic teaching is not the speaking and listening component of the teaching of national curriculum English under another name.**

- It attends as closely to the teacher’s talk as to the learner’s.
- It is a comprehensive approach to talk in teaching and learning across the whole curriculum.
- It is grounded in research on the relationship between language, learning, thinking and understanding, and in observational evidence on what makes for truly effective teaching.

**Dialogic teaching is not, or not only communication skills.**

Dialogic teaching certainly aims to improve learners’ powers of communication, but it aims to do much more than that.

**Dialogic teaching is not a single set method of teaching.**

- Dialogic teaching is an approach and a professional outlook rather than a specific method. It requires us to rethink not just the techniques we use but also the classroom relationships we foster, the balance of power between teachers and taught and the way we conceive of knowledge.
Dialogic teaching, like all good teaching, is grounded in evidence and principles. And like all good teaching it draws on a broad repertoire of strategies and techniques. The teacher draws on this repertoire in response to different educational purposes and contexts, the needs of different pupils, and the diverse character what is to be taught and learned.

### 2.1.1 Dialogic teaching and other talk

Let us take dialogic teaching first. In a nutshell, dialogic teaching comprises repertoires for everyday talk, learning talk, teaching talk and classroom organisation on which the teacher draws flexibly according to purpose and situation, and which become dialogic when they are demonstrably informed by five principles (Alexander, 2008b, pp. 112–113):

- talk for everyday life
- learning talk
- teaching talk
- classroom organisation

#### The need for pedagogical repertoire

First, the idea of repertoire is paramount. The varied objectives of teaching cannot be achieved through a single approach or technique (and in case you are thinking that I have a rosy view of Russian pedagogy I would add that it can be as unproductively monolithic as teaching anywhere else, and indeed often is. My main reason for citing Russia is because it offers such a striking contrast to approaches with which we are more familiar). Instead, teachers need a repertoire of approaches from which they select on the basis of fitness for purpose in relation to the learner, the subject-matter and the opportunities and constraints of context.
Dialogic teaching combines four repertoires: These repertoires are used flexibly, on the basis of fitness for purpose, but the **principles** remain constant.

**Repetoire (i): talk for everyday life**

We can identify many kinds of talk which empower and support everyday human interaction. Of these, we propose that whatever else schools do, they should help learners to develop, explore and use each of these:

- **Transactional talk** – to manage a wide range of social encounters and to convey and exchange meaning and intention.
- **Expository talk** – to expound, narrate and explain.
- **Interrogatory talk** – to ask questions of different kinds and in diverse contexts.
- **Exploratory talk** – to explore ideas and probe others’ thinking.
- **Expressive talk** – to articulate feelings and personal responses.
- **Evaluative talk** – to deliver opinions and make judgments.

Alexander’s theoretical concepts appear to have much commonality with Mercer et al. (1999) evaluative and hierarchical framework of Disputational, cumulative and exploratory talk. Here moving from talk characterized by disagreement (Disputational), through the acquisition of ‘common knowledge’ (cumulative), students move to exploratory talk. Mercer and Littleton (2007, p.59) deem this as the state where “knowledge is made more publically accountable and reasoning is more visible in the talk”.

Fernandez et al. (2002) posit that Disputational talk is identified by individual decision-making, and short assertions and counter-assertions and characterized by disagreements. It appears that, as Mercer and Littleton (2007) suggest, in order to scaffold and embed exploratory talk, the role of the teacher is central in determining the classroom ethos and
ensuring opportunities for learners to build on each other’s ideas. In arguing that ground rules are necessary to enable learners to engage, Mercer and Hodgkinson (2008) clarify the difference between exploratory talk, which requires an understanding that ideas will not be ridiculed or aggressively contradicted, and ‘presentational talk’, which tests understanding and focuses on correct answers. Although both forms of talk have a particular function, exploratory talk is seen as embodying the characteristics of accountability, clarity, constructive criticism and receptiveness.

**Repertoire (ii): learning talk**

In dialogic classrooms learners do not just provide brief factual answers to test or recall questions, or merely spot the answer which they think the teacher wants to hear. Instead they learn to:

1. narrate
2. explain
3. analyse
4. speculate
5. imagine
6. explore
7. evaluate
8. discuss
9. argue
10. justify
11. and they ask questions of their own.

In learning, as in life, all these forms of talk are necessary. To facilitate the different kinds of learning talk, learners in dialogic classrooms also

- **listen**
- **think about what they hear**
- give others time to think
- respect alternative viewpoints

Many of the teachers in the dialogic teaching development projects have negotiated ground-rules for talk along the lines above, and these are frequently reviewed with the learners.

**Repertoire (iii): teaching talk**

In dialogic classrooms teachers may use familiar kinds of teaching talk such as:

- **rote** (drilling ideas, facts and routines through repetition)
- **recitation** (using short question/answer sequences to recall or test what is expected to be known already)
- **instruction** (telling learners what to do and how to do it)
- **exposition** (imparting information and explaining things)

But in dialogic classrooms teachers do not limit themselves to these. They also use:

- **discussion**
- **scaffold dialogue**.

**Discussion:**

- Discussion entails the open exchange of views and information in order to explore issues, test ideas and tackle problems.
- It can be led by one person (the teacher or a student), or it can be undertaken by the group collectively.

**Scaffold dialogue involves:**

- **interactions** which encourage students to think, and to think in different ways
- **questions** which require much more than simple recall
- **answers** which are followed up and built on rather than merely received
feedback which informs and leads thinking forward as well as encourages
contributions which are extended rather than fragmented
exchanges which chain together into coherent and deepening lines of enquiry
classroom organization, climate and relationships which make all this possible.

These forms and dynamics of talk contribute to:
uptake (one person responding to and taking forward the ideas of another)
scaffolding (providing the learner with an appropriate linguistic and/or conceptual tool to bridge the gap between present and intended understanding)
handover (successful transfer of what is to be learned and assimilation of new learning to existing knowledge and understanding)

Teaching talk: shifting the balance
Rote, recitation, instruction and exposition are frequently used: indeed, worldwide they are probably the default modes of teaching talk. There is always a place for them, but discussion and dialogue are less common and children need to experience them much more frequently.
Discussion and dialogue require learners not merely to listen and answer, but also to think, engage and take decisions about their learning.
By using discussion and dialogue we seek to empower learners both cognitively and socially, not merely to tell them things or test what they know already.
Repertoire (IV): classroom organization

In dialogic classrooms teachers exploit the potential of five main ways of organizing interaction in order to maximize the prospects for dialogue:

- whole class teaching
- group work (teacher-led)
- group work (student-led)
- one-to-one (teacher and student)
- one-to-one (student pairs)

Again, all of these have their place: no one form of interaction on its own will suffice for the varied purposes, content and contexts of a modern curriculum.

2.1.2 Dialogic teaching principles

The principles of dialogic teaching are used as an analytical framework to examine support provided by the teacher to develop students’ social and cognitive ‘interactions’. Whatever kinds of teaching and learning talk are on offer, and however the interaction is organized, teaching is more likely to be dialogic if it is:

- collective
  Participants address learning tasks together.

- reciprocal
  Participants listen to each other, share ideas and consider alternative viewpoints.

- supportive
  Learners express their ideas freely, without fear of embarrassment over wrong answers, and they help each other to reach common understandings.


cumulative

Participants build on answers and other oral contributions and chain them into coherent lines of thinking and understanding.

purposeful

Classroom talk, though open and dialogic, is also planned and structured with specific learning goals in view.

The genealogy of these criteria as has been stated by Alexander (2005, p.14) is complex, and I would need another keynote session to elucidate it in full. Suffice it to say that it combines (i) a positive response to what I and others have observed by way of effective classroom interaction in the UK and elsewhere; (ii) an attempt to counter the less satisfactory features of mainstream classroom interaction (which, for example, tends not to exploit the full collective potential of children working in groups and classes, is one-sided rather than reciprocal, is fragmented or circular rather than cumulative, and is often unsupportive or even intimidating to all but the most confident child); (iii) distillation of ideas from others working in this and related fields – thus, for example, in the criterion of reciprocity you will spot the pioneering work of Palncesar and Brown (1984) among others, and in cumulating, of course, Bakhtin and indeed conventional wisdom on how human understanding, collectively as well as individually, develops.

2.1.3 Dialogic teaching and students engagement

As dialogic teaching progresses, all or most of the students should become active participants as they:

a. Articulate their own points of view. This might be in response to the bidding of the teacher or via a spontaneous offering. The views expressed might relate to their initial everyday ideas or to developing understandings of a scientific concept.
b. Refer and respond to the points of view of others. Students make reference to what other students have said, possibly stating whether or not they agree with particular ideas and giving their reasons why, and often generating further questions thereby creating continuing lines of enquiry.

c. Take extended turns in whole class and small group interactions. At times the students take extended turns and thereby do most of the talking whilst the along with the other students, do most of the listening.

d. Raise questions relevant to the developing subject matter. An important indicator of dialogic teaching is that questions are raised not only by the teacher but also by the students.

e. Attend to whole class interactions even when not directly involved. Students are actively engaged intellectually whether or not they are actually involved in discussions.

2.1.4 Dialogic teaching challenges

Adopting dialogic teaching is encountered by number of challenges some of which are identified by Alexander (2008a, p.114-119). These challenges include:

- Evidence of widening gaps in practice as some teachers achieve more change than others and are motivated to continue building on their success.

- Less attention has been given to developing the repertoire of learner’s talk- their capacities to narrate, explain, ask questions, speculate, argue reason and justify etc. Without the appropriate tools, students are limited in their abilities to think and participate fully in the discourses to which they are introduced.

- Learners are being given more time to think and respond but the challenge of building on their responses, remains unsolved in many cases. Traditional communicative practices are ingrained in
institutions and there remains a strong sense that teachers are expecting certain answers.

2.2 Dialogic teaching components

Studies of classroom communication indicate that certain patterns of interaction – exploratory talk, argumentation, effective questioning, debate and dialogue – promote high level of understanding and intellectual development through their capacity to involve teachers and learners in joint acts of meaning – making and knowledge construction. When learners are encourage to reason and argue about ideas, they are being invited to adopt habits of critical inquiring that test existing orthodoxies and challenge the natural order of things.

2.2.1 Argumentation

2.2.1.1 What do we mean by argument?

Argument or quarrel? Many people would ask, “What is the difference?” To them, the two terms convey the same meaning, both calling to mind two angry people, shouting, trading insults, and sometimes slugging it out.

To many, the word argument connotes anger and hostility, as when we say, “I just got in a huge argument with my roommate”. Or “My brother and I argue all the time”. What we picture here is heated disagreement, rising pulse rates, and an urge to slam doors. Another popular image of argument is debate – a presidential debate, perhaps a high school, or college debate tournament. But to our way of thinking, argument does not imply anger. In fact, arguing is often pleasurable. It is a creative and productive activity that engages us at high levels of inquiring and critical thinking, often in conversation with persons we like and respect. We are always invited to think not of a fist-banging speaker but of a small group of reasonable persons seeking the best solution to a problem. Argument entails a desire for truth; it aims to find the best
solutions to complex problems. Arguers’ goal is not only to support their own points of view or expose weaknesses in views they find faulty or to win the game but to find and promote the best belief or course of action. Arguments can be either explicit or implicit. An explicit argument states directly a controversial claim and supports it with reasons and evidence. An implicit argument, in contrast, does not look like an argument. It may be a poem or short story, a photograph or cartoon, a personal essay, or an autobiographical narrative. But like an explicit argument, it persuades its audience toward a certain point of view.

It is worth to mention that linguists and philosophers have disagreed over centuries about the meaning of the term and about the goals that arguers should set for themselves. So, the meaning of the term is controversial. It is crucial to explain three defining features of argument. These features are: argument requires justification of its claims, it is both a product and a process, and it combines elements of truth seeking and persuasion. These defining features had been explained by Ramage and Bean (1997) as following:

**Argument requires justification of its claims**

Two necessary conditions that must be met before something is called an argument. A set of two or more assertions and the attempt to resolve the conflict through an appeal to reason. But a good argument demands more than meeting these two formal requirements. For the argument to be effective, an arguer is obligated to clarify and support the reasons presented. For example, “But I’m sixteen years old!” is not yet a clear support for the assertion “I should be allowed to set my own curfew.” On the surface, young person’s argument seems absurd. Her parent, of all people, knows precisely how old is she. What makes it an argument is that behind her claim lies an unstated assumption – all sixteen – year – olds are old enough to set their own curfew. What young
person needs to do now is to support that assumption. In doing so, she must anticipate the sorts of questions the assumption will raise in the mind of her parent: What is legal status of sixteen–year-olds? What is actual track record of young person in being responsible? Each of these questions will force young person to reexamine and clarify her assumptions about the proper degree of autonomy for sixteen–year-olds. Her response to those questions should in turn force the parents to reexamine their assumptions about the dependence of sixteen–year-olds on parental guidance and wisdom.

As young person and parent listen to each other’ points of view, both parties find themselves in the uncomfortable position of having to examine their own beliefs and to justify assumptions that they have taken for granted. Here we encounter one of the earliest senses of the term to argue, which is “to clarify”. An arguer begins to clarify her own position on an issue; she also begins to clarify her audience’s position. Such clarification helps the arguer to see how she might accommodate her audience’s views, perhaps by adjusting her own position or by developing reasons that appeal to her audience’s values.

**Argument is both a process and a product**

Can be viewed as a process in which two or more parties seek the best solution to a question or problem. Argument can also be viewed as a product, each product being any person’s contribution to the conversation at a given moment. In an informal discussion, the products are usually short whereas under formal settings, an orally delivered product might be a short impromptu speech or a longer, carefully prepared formal speech as in an oral brief before a judge.

**Argument combines truth seeking and persuasion**

In thinking about argument as product, writers find themselves continually moving back and forth between truth seeking and persuasion.
– that is, between questions about the subject matter (What is the best solution to this problem?) and about audience (What reasons and evidences will most persuade the audience?). Different rhetorical situations place different emphases on truth seeking versus persuasion, (pp.7-10)

Other linguists such as Coffin and O’Halloran (2008) have offered useful clarification from their interest in investigating the processes of argumentation in educational context. They defined argumentation as the process and argument as the product of putting forward and negotiating ideas and perspectives. (p.219)

Mercer drew attention to three forms of argument. These are:

- Disputational talk which is competitive and characterized by the unwillingness of participants to take on the other person’s point of view.
- Cumulative talk in which speakers build constructively and uncritically on each other’s contributions.
- Exploratory talk which proceeds by virtue of critical reflection and reasoned argument in which proposals may be challenged and counter – challenged.(200,p.98)

2.2.1.2 Internal structure of arguments
Typically an argument has an internal structure, comprising the following:

1. a set of assumptions or premises
2. a method of reasoning or deduction and
3. a conclusion or point.

An argument must have at least one premise and one conclusion. Often classical logic is used as the method of reasoning so that the conclusion follows logically from the assumptions or support. One challenge is that if the set of assumptions is inconsistent then anything
can follow logically from inconsistency. Therefore it is common to insist that the set of assumptions is consistent. It is also good practice to require the set of assumptions to be the minimal set, with respect to set inclusion, necessary to infer the consequent. Such arguments are called MINCON arguments, short for minimal consistent. Such argumentation has been applied to the fields of law and medicine. A second school of argumentation investigates abstract arguments, where 'argument' is considered a primitive term, so no internal structure of arguments is taken on account. In its most common form, argumentation involves an individual and an interlocutor/or opponent engaged in dialogue, each contending differing positions and trying to persuade each other. Other types of dialogue in addition to persuasion are eristic, information seeking, inquiry, negotiation, deliberation, and the dialectical method (Douglas Walton). The dialectical method was made famous by Plato and his use of Socrates critically questioning various characters and historical figures.

2.2.1.3 Kinds of argumentation

- **Conversational argumentation**

  The study of naturally-occurring conversation arose from the field of sociolinguistics. It is usually called conversational analysis. Inspired by ethno methodology, it was developed in the late 1960s and early 1970s principally by the sociologist Harvey Sacks and, among others, his close associates Emanuel Schegloff and Gail Jefferson. Sacks died early in his career, but his work was championed by others in his field, and CA has now become an established force in sociology, anthropology, linguistics, speech-communication and psychology. It is particularly influential in interactional sociolinguistics, discourse analysis and discursive psychology, as well as being a coherent discipline in its own right. Recently CA techniques of sequential analysis have been employed by
phoneticians to explore the fine phonetic details of speech. Empirical studies and theoretical formulations by Sally Jackson and Scott Jacobs, and several generations of their students, have described argumentation as a form of managing conversational disagreement within communication contexts and systems that naturally prefer agreement.

- **Mathematical argumentation**

  The basis of mathematical truth has been the subject of long debate. Frege in particular sought to demonstrate (see Gottlob Frege, The Foundations of Arithmetic, 1884, and Logicism in Philosophy of mathematics) that arithmetical truths can be derived from purely logical axioms and therefore are, in the end, logical truths. The project was developed by Russell and Whitehead in their Principia Mathematica. If an argument can be cast in the form of sentences in Symbolic Logic, then it can be tested by the application of accepted proof procedures. This has been carried out for Arithmetic using Peano axioms. Be that as it may, an argument in Mathematics, as in any other discipline, can be considered valid only if it can be shown that it cannot have true premises and a false conclusion.

- **Scientific argumentation**

  Perhaps the most radical statement of the social grounds of scientific knowledge appears in Alan G.Gross's The Rhetoric of Science (Cambridge: Harvard University Press, 1990). Gross holds that science is rhetorical "without remainder," meaning that scientific knowledge itself cannot be seen as an idealized ground of knowledge. Scientific knowledge is produced rhetorically, meaning that it has special epistemic authority only insofar as its communal methods of verification are trustworthy.
• Legal argumentation

Legal arguments are spoken presentations to a judge or appellate court by a lawyer, or parties when representing themselves of the legal reasons why they should prevail. Oral argument at the appellate level accompanies written briefs, which also advance the argument of each party in the legal dispute. A closing argument, or summation, is the concluding statement of each party's counsel reiterating the important arguments for the trier of fact, often the jury, in a court case. A closing argument occurs after the presentation of evidence.

• Political argumentation

Political arguments are used by academics, media pundits, and candidates for political office and government officials. Political arguments are also used by citizens in ordinary interactions to comment about and understand political events. The rationality of the public is a major question in this line of research. Political scientist Samuel L. Popkin coined the expression "low information voters" to describe most voters who know very little about politics or the world in general. In practice, a "low information voter" may not be aware of legislation that their representative has sponsored in Congress. A low-information voter may base their ballot box decision on a media sound-bite, or a flier received in the mail. It is possible for a media sound-bite or campaign flier to present a political position for the incumbent candidate that completely contradicts the legislative action taken in Washington D.C. on behalf of the constituents. It may only take a small percentage of the overall voting group who base their decision on the inaccurate information, a voter block of 10 to 12%, to swing an overall election result. When this happens, the constituency at large may have been duped or fooled. Nevertheless, the election result is legal and confirmed. Political consultants will take advantage of low-information voters and
sway their votes with misinformation because it can be easier and sufficiently effective. Institutions such as factcheck.org have come about in recent years to help counter the effects of such campaign tactics.

2.2.2 Dialogue

Dialogue is a famous technique of communication. This term has been used in many cultures. Dialogue is in the Vedas and Western cultures. In common sense, ‘Dialogue’ is defined as a process of conversation between two or more persons for exchanging opinions or ideas. Many thinkers from the East and the West have given different kinds of meanings to the term Dialogue. Some of these thinkers, like Socrates, Martin Buber, Paulo Freire, David Bohm, and J. Krishnamurti have used this term in different contexts. Socrates used the technique of Dialogue for social awareness. Martin Buber used Dialogue for spirituality and education. David Bohm, the eminent physicist suggested the use of Dialogue for creating holism of mind. Peter Senge has used the term Dialogue for creating learning organizations. Further, the notion of Dialogue has been used by Paulo Freire for creating ‘pedagogy of the oppressed’.

Dialogue is collaborative as two or more sides work together towards common understanding. In Dialogue, finding common ground is the goal and one is prepared to listen to the other side(s) in order to understand, find meaning, and find agreement. Dialogue enlarges and possibly changes a participant’s point of view. It reveals assumptions for reevaluation. Dialogue causes introspection on one’s own position and opens the possibility of reaching a solution that is better than any of the original solutions. The goal is to create open-minded attitude- openness to being wrong and an openness to change. While dialoguing, one submits one’s best thinking, knowing that the other peoples’ reflections will help improve it rather than destroy it. Dialogue calls for temporarily
suspending one’s beliefs; one searches for strengths in the other positions. Additionally, Dialogue involves a real concern for the other person and seeks to not alienate or offend. Further, it assumes that many people have pieces of the answer and that together they can put them into a workable solution. Dialogue remains open-ended. In contrast, debate is oppositional: two sides oppose each other and attempt to prove the other wrong. Winning is the goal in debate. One listens to the other side in order to find flaws and to counter its arguments. Debate affirms a participant’s own point of view. It defends assumptions as truth and causes critique of the other position. Furthermore, debate defends one’s own position as the best solution and excludes other solutions. Debate creates a closed-minded attitude, a determination to be right. Here, one submits one’s best thinking and defends it against challenges to show that it is right. It calls for investing wholeheartedly in one’s beliefs and searches for glaring differences. Moreover, in debate, one searches for flaws and weaknesses in the other position. Also, debate involves a countering of the other position without focusing on feelings or relationships, and often belittles or deprecates the other person. What’s more, debate assumes that there is one right answer and that someone has it. It demands a conclusion.

2.2.2.1 The meaning of the term dialogue

In dialogic interactions learners are exposed to alternative perspectives and required to engage with another person’s point of view in ways that challenge and deepen their own conceptual understanding. As stated by Alexander (2008a, p.27):

> It is the element of “dialectic”, understood as logical and rational argument, which distinguishes dialogue from main stream oral or ‘interactive’ teaching as currently understood by many teachers.

Alexander defined the term dialogue in terms of five types of teacher talk:
1. Rote (teacher – class): The drilling of facts, ideas and routines through repetition.

2. Recitation (teacher – class or teacher – group): The accumulation of knowledge and understanding through questions designed to test or stimulate recall of what has previously been encountered, or to cue learners to work out the answer from clues provided in the question.

3. Instruction/exposition (teacher – class, teacher – group or teacher – individual): Telling the learner what to do, and/or imparting information, and/or explaining facts, principles or procedures.

4. Discussion (teacher – class, teacher group or student – student): The exchange of ideas with a view to sharing information and solving problems.

5. Dialogue (teacher – class, teacher – group, teacher – student, or student – student): Achieving common understanding through structured and cumulative questioning and discussion which guide and prompt, reduce choices, minimize risk and error, and expedite, handover, of concepts and principles.

The word dialogue comes from two Greek roots, dia and logos, suggesting “meaning following through.” This sense of the word stands in standards in stark contrast to what we normally think of as “dialogue” – a mechanistic and unproductive debate between people seeking to defend their views against one another. In dialogue, people gradually learn to suspend their defensive exchanges and further, to probe into the underlying reasons for why those exchanges exist. However, this probing into defenses is not the central purpose of dialogic session: the central purpose is simply to establish a field of genuine meeting and inquiry – a setting in which people can allow a free flow of meaning and vigorous exploration of the collective background of their thought, their personal predispositions, the nature of their shared attention, and the rigid features
of their individual and collective assumptions. Hence, dialogue can be initially defined as a sustained collective inquiry into the processes, assumptions, and certainties that compose everyday experience. Yet, this is experience of a special kind – the experience of the meaning embodied in a community of people. If people can be brought into a setting where they, at their choice, can become conscious of the very process by which they form tacit assumptions and solidify beliefs, and be rewarded by each other for doing so, then they can develop a common strength and capability for working and creating things together. This free flow of inquiry and meaning allows new possibilities to emerge. Unlike most forms of inquiry in dialogue is one that places primacy on the whole. Dialogue’s aim is to take into account the impact one speaker has on the overall system, giving consideration to the timing of comments, and their meaning to others. Dialogue seeks to unveil the ways in which collective patterns of thinking and feeling unfold – both as conditioned, mechanistic reflexes, and potentially as fluid, dynamically creative exchanges.

Based on the etymology of the word, Isaacs (1994, p.25) contends that dialogue provides “a potentially critical foundational process for creating new “infrastructures for learning” within modern organizations” (1994). He identifies four themes suggestive of the powerful, potentially radical possibilities for leaders, managers, and change agents:

- Dialogue seems to be emerging as a cornerstone for “organizational learning”.
- Dialogue appears to be a powerful way of harnessing the inherent-organizing collective intelligence of groups of people and of both broadening and deepening the collective inquiry process.
- Dialogue shows possibilities for being an important breakthrough in the way people might govern themselves, whether in public or private domains.
Dialogue shows promise as an innovative alternative approach to producing coordinated action among collective.

Today, dialogue is used in classrooms, community centers, corporations, federal agencies, and other settings to enable people, usually in small groups, to share their perspectives and experiences about difficult issues. It is used to help people resolve long-standing conflicts and to build deeper understanding of contentious issues. Dialogue is not about judging, weighing, or making decisions, but about understanding and learning. Dialogue dispels stereotypes, builds trust, and enables people to be open to perspectives that are very different from their own.

It seems that there is no consensus on a precise definition. Dialogue is not simply talk or the sharing of ideas. It is a structured, extended process leading to new insights and deep knowledge and understanding and, ultimately, better practice. There is a strategic orientation implicit in dialogue aimed at advancing beyond participants’ initial stages of knowledge and belief.

2.2.2.2 Scaffolding

As with many previous terms, the notion of scaffolding can be considered at several levels in the activity of education. Edwards and Mercer describe the role of teachers as “scaffolding” learner’s entry into the universe of educational discourse (1987, p161). The scaffolding amounts to creation of a framework of talk and action that provides a platform for the development of common knowledge. This is important given one of the authors’ central arguments that higher mental functioning is distinguished by the levels of reflection and self-awareness awakened by an activity, rather than disembeddedness from context. In the Thinking Together programmes, these principles are reflected in the requirement that learners establish ground rules for talk that encourage explicit use of reasoning words – what, how, why.
Notions of scaffolding also surface in Alexander’s work. The principles of dialogic teaching that relate to the conduct and ethos of classroom talk (collectivity, reciprocity and support) might be regarded as prompts for creating contexts in which learners feel able to explain and test their understandings without fear of ridicule or failure and in the knowledge that their ideas will be taken seriously. In this way the processes of coming to know are “scaffolded” by the affective context. At another level, Alexander’s insistence that dialogue is understood as part of a wider conceptual framework of pedagogy, reminds teachers of the way in which opportunities to learn are enhanced or constrained by the nature of the activities and discourses in which learners engage (2008a, p96).

In Culture and Pedagogy, Alexander (2000) presents and interprets evidence from a large-scale comparative study of primary school teaching in five countries (India, Russia, France, England and the United States). The project sought to explore how national cultural traditions influenced the processes and practices of teaching at the classroom level. The analytical core of the book lies in a discussion of 17 transcripts of extracts of lessons from different schools in the various countries. On the basis of this analysis, Alexander sets forth a typology of classroom discourse, distinguished along the dimensions of: classroom organisation (whole class, group, and individual); pedagogic mode (direct instruction, discussion, monitoring); pedagogic function (rote learning, instruction, scaffolding, assessment, information sharing, problem solving, scaffolding, supervision); and discourse form (interrogatory, expository, evaluative, and dialogic). The evidence of the study suggested that interrogatory whole class direct instruction is ‘probably the dominant teaching method internationally’ (p. 516). However, there are moments in the data where the talk takes a different form and the teacher treats the
students as fellow discussants, striking a ‘less unequal’ relationship between them for the time being. In a formulation indebted to the theoretical work of Bruner, Alexander proposes the following definition of ‘scaffolded dialogue’ (p. 527):

Scaffolded dialogue [is] achieving common understanding through structured and sequenced questioning, and through ‘joint activity and shared conceptions,’ which guide, prompt, reduce choices and expedite ‘handover’ of concepts and principles.

Bakhtin draws a distinction between dialogue and conversation, arguing that dialogue possesses a greater degree of structure, and is differentiated from conversation by the purposeful use of questioning in the pursuit of enquiry. Despite the ubiquity of transmission styles of teaching demonstrated by the study, he argues that macro-sociological theory tends to underestimate the potential autonomy of teachers to reshape classroom discourse along dialogic lines. For Alexander, such dialogic discourse is the main method for fostering a ‘pedagogy of mutuality’, which treats students not as empty vessels to be filled with received wisdom by the teacher, but as competent thinkers in their own right.

The concept of scaffolded dialogue adumbrated in Culture and Pedagogy is developed in a later booklet which elaborates a model of ‘dialogic teaching’ (Alexander, 2004). Alexander describes the principles of this approach as teaching which is: collective; reciprocal; supportive; cumulative; and purposeful (p. 29). He goes on to specify a lengthy list of indicators which can be used to identify dialogic teaching in the classroom (pp. 31-34). The first 14 of these refer to contextual conditions rather than to characteristics of the discourse per se (e.g. lesson transitions are managed economically). The remaining 47 indicators relate to more concrete properties of classroom interaction, and are
grouped under seven headings: teacher-pupil interaction; pupil-pupil interaction; teacher-pupil monitoring; teacher questioning; pupil responses to questioning; teacher feedback on responses; and the functions served by pupil talk. For example, Alexander suggests that dialogic teaching is indicated by teacher-pupil interaction in which turns are managed by shared routines rather than through competitive bidding.

In the final section of the booklet, he summarizes the interim findings from development projects aimed at promoting the use of a dialogic style of teaching in two Local Education Authorities in England. The findings indicate that shifts in the prevailing styles of interaction had taken place in some classrooms, and there was evidence of improvements in oracy among students. In particular, where these shifts had taken place, the classroom climate had become more inclusive, as the changed dynamics of teacher-student interaction furnished greater opportunities for less able students to participate competently in lesson activities. Against these positive outcomes, the projects also demonstrated the ‘staying power’ of recitation as the default mode of pedagogy, as there were many classrooms where little or no change in the conduct of discourse had taken place.

One of the most significant insights to emerge from Alexander’s work is that the kind of communicative competence which students are required to display in the classroom is culturally specific, since different norms of interaction are valued in different countries. For example, his analysis shows that in Russia and France it is more common for one student to participate on behalf of the class in a conceptually complete cycle of exchanges with the teacher, whereas in England and the United States whole class discussion tends to be managed by students bidding competitively for each turn, with the teacher rotating turns by nominating the next speaker, each successive response slot typically being allocated
to a different student. For Alexander, these differences in the management of classroom discourse are linked with different cultural traditions in the philosophy of pedagogy: a central European tradition of collectivist pedagogy, on the one hand, which encourages a convergence of learning outcomes whereby the whole class moves forward together; and, on the other hand, an Anglo-American tradition which treats the class as an aggregate of individuals, and fosters a divergence of learning outcomes within the group. These observations lead him to make a welcome critique of the concept of ‘interactive whole class teaching’, which was heavily promoted in government policy in the UK in the 1990s, for its failure to distinguish between the cognitive pace of teaching and the pace of interaction exchange. Quick-fire questioning around the class may appear to lend pace to a lesson, but since it typically elicits a sequence of short, undeveloped responses from students, it may do little to extend their thinking. Alexander commends instead the development of discourse strategies aimed at encouraging students to ‘think aloud’ and develop their ideas at greater length, for example by the teacher pitching a question at a particular, named individual (managing turn-taking by nomination without competitive bidding), and the use of follow-up questions directed at the same student (extending the teacher-student exchange on a given topic rather than rotating successive turns around the class). He emphasizes that speech should not be seen as an inferior, less developed form of language use than writing, but that the development of oracy is an important goal of education in its own right, and that increased competence in oracy accompanies and contributes to the development of competence in literacy rather than being in competition with it.

Wolfe (2006) sought to reveal the meanings of greatest intrinsic value to teachers and their students through examination of the discursive
action mediating classroom activities. One outcome of this research was development of a list of strategies through which educationally productive spells of dialogue appeared to be triggered – the “how” of interaction at a micro level perhaps? These include:

Teachers

- Asking authentic questions.
- Using deferring questions to check learner’s meanings.
- Pausing to allow children time to i) think and ii) interject and express ideas fully.
- Adopting a low modality, using words such as “perhaps” and “might” as invitation to a range of possible actions.
- Offering new content relevant to the theme unfolding.
- Developing a line of argument by staying with one child through a sequence of connected questions.
- Accepting responses without evaluating them.
- Engineering opportunities for students to participate actively in the discourses.
- Building on learner’s interests.
  and students
- Asking questions and making statements.

Grounded in empirical data, these mechanisms resonate with existing indicators of dialogic teaching (Alexander, 2008b) and it would be tempting to view both as solutions to the challenge of teaching through dialogue. However, they presuppose the existence of at least some of the following features of classroom life:

- Teachers structure learning and facilitate learner’s active participation in the learning discourses. Cross-curricular links are exploited.
• Teachers have sound knowledge of curriculum content and understanding of the issues likely to confuse or challenge learner’s thinking.

• Teachers’ questions suit the instructional purpose. Some invoke a range of responses and encourage divergent thinking, others require single word responses. In the chaining of question and answers ideas are developed or modified.

• Teachers encourage language production and learning talk through activities that require learner to respond in extended utterances. They model language that is comprehensible and/or exceeds what learners are able to produce alone.

• Teachers listen and respond to the content of students’ utterances, challenging, probing and extending their meanings.

• Children are offered constructive and formative feedback on performance.

• Visual materials and curriculum resources are selected with care and teachers understand how artifacts i) reflect cultural meanings and ii) mediate learning.

• Parties to the discourse live with provisionality and uncertainty; turns and speaking rights are evenly distributed. Children initiate in dialogue and at times the teacher withdraws from the floor. Students are expected to address the public forum in an intelligible and articulate manner and to listen to the substance of each other’s contributions (Wolfe, 2006, pp258-259).

From a Bakhtinian perspective (1981), **dialogue** is not merely a term for describing the structure of speech in discourse: it is a phenomenon that penetrates the very structure of words themselves. The many different meanings that words express are shaped in the dialogic
interaction with “alien” words at the moment of utterance. Speakers’ utterances, orientated towards the active responsive understanding of others, are selectively appropriated and assimilated into new concept systems. It follows then that every word written or spoken is filled with the voices of others and there is no “overcoming” or “synthesis” (Wegerif, 2008, p350). Dialogue is not simply a precondition for learning but essential for knowledge construction and human development generally.

2.2.2.3 The relationship between dialogue and pedagogy

As we have seen, empirical classroom research for the last 30 years has indicated that discourse patterns are monologue, controlled and shaped by the teacher. There needs to be a significant shift in classroom practice. Smith and Higgins (2006) suggest that the focus of attention should be placed, not on the questions that teachers ask, but more on the way in which they react to learners’ responses; in this they share some commonality with Alexander’ notion of an ‘emerging pedagogy’ of talk as means of helping to shape and develop learners’ engagement with learning and understanding.

2.2.2.4 Difficulties relating to the promotion of pedagogic dialogue

Moore (2004) believes that the discourse of the ‘charismatic’ teacher is a powerful myth founded on Burner’s notion of ‘folk pedagogy’. He suggests that ‘charisma’, the characteristic regularly cited by students as paramount in a good teacher, might be better conceptualized as ‘communicative’. This offers a potential bridge all engaged in teaching from the cult of personality, through acquisition of a set of skills, to a growth in understanding, particularly of “knowing when to talk, when to listen and when to interrupt” (p.74).

The power of dialogic approaches to learning and teaching can extend beyond whole class teaching. Indeed, it may argued that
productive use of cognitively stimulating dialogue could be explored most fruitfully in small-group learning. This, however, does not appear to be widely recognized by teachers as practice that promotes thinking and understanding. There is speculation that it may be due to the perceived challenge to teachers’ control, the demands on organizational changes, or the sustained effort required to manage talk. As Baines et al. (2003, p.31) point out, “creating effective group-working tasks and conditions is harder and more time consuming than a traditional independent and didactic learning approach”. It may also be the result of a lack of understanding of ways to scaffold dialogue, and of what their talk role might be in promoting this.

Fisher (2011) argues that if Gillies (2006) is correct in her supposition that teachers lack an understanding of how strategies for cooperative investigation may be embedded in the curriculum, then it is fair to suppose that the higher cognitive challenge of fostering ‘inter thinking’, or co-learning through a social pedagogical approach remains a challenge too far for many.

**2.2.3 Effective questioning**

The subject of classroom questioning has been the interest and concern of researchers and practitioners because of its long and venerable history as an educational strategy. It is also a powerful teaching approach because of its wide spread use as a contemporary teaching technique. Asking questions is natural and intuitive. As teachers, we ask questions as soon as the lesson starts and continue until the end. Asking questions forms part of any lesson because it invites the student to think, and even within a ‘lecture’ style lesson, rhetorical questions are used to invite silent agreement or begin the organisation of ideas to present a response. Teachers use questions to engage the students and sustain an ‘active’ style to the learning. The teacher also uses questions as part of the
assessment of learning in order to determine how they best structure, organise and present new learning. However, research has found that most teachers only wait 0.7 seconds for an answer. Developing questioning requires much greater emphasis on the time provided for students to think individually, collaboratively and deeply to develop and share better answers. Historically, teachers have asked questions to check what has been learnt and understood, to help them gauge whether to further review previous learning, increase or decrease the challenge, and assess whether students are ready to move forward and learn new information. This can be structured as a simple ‘teacher versus the class’ approach, where the teacher asks a question and accepts an answer from a volunteer, or selects/conscripts a student to answer. These approaches are implicit in any pedagogy, but teachers need a range of questioning strategies to address different learning needs and situations.

Questioning is fundamental to good teaching and learning. When effective questioning is a significant feature of lessons, learners are more likely to:

• develop a fuller understanding of an idea because they have tried to explain it themselves;
• be clear about the key issues in a lesson;
• easily recall existing knowledge;
• be able to link the ideas in the lesson with their existing knowledge;
• tackle problems at a deep level and be able to extend their thinking;
• engage easily with a task because they are clear about what is expected;
• develop independence in the way they learn and think.

2.2.3.1 Definition

A question is any sentence which has an interrogative form or function. In classroom settings, teacher questions are defined as instrumental cues or stimuli that convey to students the content elements
to be learned and directions to what for, what they are to do and how they are to do it. Effective questioning means:

- choosing questions that suit your purpose;
- Including reflective listening statements and summaries to keep the flow of the conversation going.

Researches on classroom practice have shown that effective teachers use a greater number of open questions than less effective teachers. The mix of open and closed questions will depend on what is being taught and the objective of the lesson or lecture. However, teachers who ask no open questions in a lesson may be providing insufficient cognitive challenges for students. Questioning is effective when it allows pupils to engage with the learning process by actively composing responses. Research (Borich 1996; Muijs and Reynolds 2001; Morgan and Saxton 1994; Wragg and Brown 2001) suggests that lessons where questioning is effective are likely to have the following characteristics:

- Questions are planned and closely linked to the objectives of the lesson.
- The learning of basic skills is enhanced by frequent questions following the exposition of new content that has been broken down into small steps. Each step should be followed by guided practice that provides opportunities for pupils to consolidate what they have learned and that allows teachers to check understanding.
- Closed questions are used to check factual understanding and recall.
- Open questions predominate.
- Sequences of questions are planned so that the cognitive level increases as the questions go on. This ensures that pupils are led to answer questions which demand increasingly higher-order thinking skills but are supported on the way by questions which require less sophisticated thinking skills.
• Pupils have opportunities to ask their own questions and seek their own answers. They are encouraged to provide feedback to each other.
• The classroom climate is one where pupils feel secure enough to take risks, be tentative and make mistakes.

2.2.3.2 Purposes of classroom questions

Cotton listed the following purposes for the classroom questions:
1. Developing interest and motivating students to become actively involved in lessons.
2. Evaluating students’ preparation and check on homework or seatwork completion.
3. Developing critical thinking skills and inquiring attitudes
4. Reviewing and summarize previous lessons.
4. Nurturing insights by exposing new relationships.
5. Assessing achievement of instructional goals and objectives.
6. Stimulating students to pursue knowledge on their own.

2.2.3.3 Why is asking questions important?

To learn effectively students need to learn actively, and one way to encourage active learning is to ask questions. Good questioning skills are one of the most important and also the most difficult teaching techniques to develop. Effective questioning will enable teachers to:

• Gain an insight into their students’ level of understanding.
• Develop the communication skills of their students.
• Extend students’ analytical skills.
• Develop critical thinking skills.
• Develop a relationship with their students.
• Provide recognition and reward to students.
• Promote an environment in which students learn actively.
While questioning is one of the best ways to get discussion going, the most common error in questioning is not allowing students enough time to think. However, there are a number of ways that you can improve your questioning technique. The most important is that you analyse the types of questions that you ask and think carefully about your own teaching. You need to develop an environment in which students feel comfortable with questions and expect to be asked them. Asking “why” or “how” questions enable students to figure things out for themselves and so learn better. Asking good questions also puts the responsibility for learning back with the students, enhancing their autonomy and facilitating participation.

Alexander (2008, p.25) has emphasized the importance of questions by stating that questions, of course are important, and there is no shortage of useful guidance on ways of framing them for different purposes. Thus, questions may recall, elicit, check, probe, instruct, develop, or manage. They may be open, closed or leading, narrow or discursive, clear or confused. But important though questions are – and they certainly need to be conceived with care – we could profitably pay no less attention to students’ answers to our questions and to what we do – or more commonly, alas, fail to do – with those answers. This why ‘uptake’ (conversant listening and responding to each other and – especially – teachers following up students’ answers) emerges as such a critical factor – product study of the relationship between classroom discourse and student learning. There is little point in framing a well – conceived question and giving students ample ‘wait-time’ to answer it, if we fail to engage with the answer they give and hence with the understanding or misunderstanding which that answer reveals. Put another way, if we want students to talk to learn – as well as learn to talk – then what they say probably matters more than what teachers say. So it is the qualities of
extension and cumulation which transform classroom talk from the familiar closed question / answer / feedback routine into purposeful and productive dialogue where questions, answers and feedback progressively build into coherent and expanding chains of inquiry and understanding.

2.2.3.4 Placement and timing of questions

Asking questions frequently during class discussions is positively related to:
1. Increasing the frequency of classroom questions does not enhance the learning facts.
2. Learning of more complex material. (Some researchers have found no relationship; others have found a negative relationship.)
3. Posing questions before reading and studying material is effective for students who are older, high ability, and/or known to be interested in the subject matter.
4. Very young learners and poor readers tend to focus only on material that will help them answer questions if these are posed before the lesson is presented.

2.2.3.5 Principles of Questioning

The educational goals they are seeking, there is more to good questioning technique than simply asking the proper question. The following principles were developed by Richard L. Loughlin and provide an excellent set of guidelines for the teacher who wishes to develop good questioning techniques:
I. Distribute questions so that all, including non-volunteers, are involved.
II. Balance factual and thought-provoking questions.
III. Ask both simple and exacting questions, so that the poorer students may participate and the brighter students may be extended.
IV. Encourage lengthy responses and sustained answers. (Avoid yes-no questions, questions overlaid with afterthoughts, fragmentary questions, and those that tug or encourage guessing.)


In addition to these principles, Baroody (1998, pp.17-18) has provided eight tips for effective questioning:

1. **Anticipate student thinking**

   An important part of planning a lesson is engaging in solving the lesson problem in a variety of ways. This enables teachers to anticipate student thinking and the multiple ways they will devise to solve the problem. This also enables teachers to anticipate and plan the possible questions they may ask to stimulate thinking and deepen student understanding.

2. **Link to learning goals**

   Learning goals stem from curriculum expectations. Overall expectations (or a cluster of specific expectations) inform teachers about the questions to ask and the problems to pose. By asking questions that connect back to the curriculum, the teacher helps students centre on these key principles. Students are then better able to make generalizations and to apply their learning to new problems.

3. **Pose open questions**

   Effective questions provide a manageable challenge to students – one that is at their stage of development. Generally, open questions are effective in supporting learning. An open question is one that encourages a variety of approaches and responses. Open questions help teachers build student self-confidence as they allow learners to respond at their own stage of development. Open questions intrinsically allow for differentiation. Responses will reveal individual differences, which may
be due to different levels of understanding or readiness, the strategies to which the students have been exposed and how each student approaches problems in general. Open questions signal to students that a range of responses are expected and, more importantly, valued. By contrast, yes/no questions tend to stunt communication and do not provide us with useful information. A student may respond correctly but without understanding. Invitational stems that use plural forms and exploratory language invite reflection. Huinker and Freckman (2004, p. 256) suggest the following examples:

As you think about… As you consider…
Given what you know about… In what ways…
In regard to the decisions you made… In your planning…

4. Pose questions that actually need to be

Rhetorical questions such as “Doesn’t a square have four sides?” provide students with an answer without allowing them to engage in their own reasoning.

5. Incorporate verbs that elicit higher level thinking of Bloom’s taxonomy

Verbs such as connect, elaborate, evaluate and justify prompt students to communicate their thinking and understanding, to deepen their understanding and to extend their learning. Huinker and Freckman (2004, p. 256) provide a list of verbs that elicit specific cognitive processes to engage thinking: observe evaluate decide conclude notice summarize identify infer remember visualize compare relate contrast differ predict consider interpret distinguish explain describe.
6. Pose questions that open up the conversation to include others

The way in which questions are phrased will open up the problem to the big ideas under study. The teacher asks questions that will lead to group or class discussions about how the solution relates to prior and new learning. Language conversations then occur not only between the teacher and the student, but also between students within the classroom learning community.

7. Keep questions neutral

Qualifiers such as easy or hard can shut down learning in students. Some students are fearful of difficult questions; others are unchallenged and bored by easy questions. Teachers should also be careful about giving verbal and non-verbal clues. Facial expressions, gestures, and tone of voice can send signals, which could stop students from thinking things through.

8. Provide wait time

When teachers allow for a wait time of three seconds or more after a question, there is generally a greater quantity and quality of student responses. When teachers provide wait time, they find that less confident students will respond more often; many students simply need more time than is typically given to formulate their thoughts into words. Strategies like turn and talk, think-pair-share and round robin give students time to clarify and articulate their thinking.

2.2.3.6 Types of questions

The type of question to be asked depends on the reason for asking it. Questions can be organized in a variety of ways. Some question styles are listed below:

Closed vs. Open

The most common question style relates to the learner response. If the correct answer is in the question, or there is only one correct answer, or the learner only has to agree or disagree, then it is usually considered a
**closed question.** Example: The common rafter requires only 4 saw cuts. Agree or disagree? Closed questions can be used to review or establish a rhythm. Examples: What is the reason the suspension is created first? What is the first step in the process? What is the next step? Etc. The more favoured approach is to use a question that requires learners to generate an answer of their own. This style is referred to as an *open question.* Example: What saw cuts are required to make a common rafter?

**Convergent vs. Divergent**

The convergent question restricts the responses to predetermined answers. Examples: What are the possible reasons that . . . ? What are the factors controlling the speed of a motor? The divergent question allows a multitude of correct responses. This style is an excellent choice for situations where learners are being required to be creative or look for alternatives beyond their experience. Examples: What other factors should the analysis have considered?

**Simple vs. Difficult**

The simple question requires simple recall or restatement of given information. Examples: What are the four principles of marketing? State the three components of impedance. The difficult question is used at the application level of learning, which is usually college level courses are aimed. Examples: Which of the four principles was the most inadequately addressed? If a resonant circuit has the capacitor replaced with one of the double capacity, what will happen to the impedance? The higher level question is used for the mastery of various concepts. It is used to stimulate a higher level of thinking, for example, to evaluate, make predictions, argue, and draw inferences. Examples: How was the stethoscope campaign affected by the change in corporate leadership? What might have alleviated the impact of this transition? How does the variable capacitor influence the tuning of a radio?
2.2.4.7 Other types of questions:

Hypothetical

Hypothetical questions are useful for forcing learners to move beyond what has been dealt with into the anticipated, and even unanticipated, area of “what ifs.” Examples: Given what we know about what happened, what do you predict would have happened if there had been a mid-course correction of the stethoscope campaign with a doubling of the advertising budget for trade journals? What would happen if the capacitor in the circuit shorted out?

Reflective

Reflective questions require learners to look back with a future perspective. They can be used to focus on both the application of the content and the process used to learn or solve problems. Examples: Based on what you learned about the process, what caution would you keep in mind the next time you approach a similar situation? If you had the problem to do over again, what would you do differently? What would you have liked to have known before starting on the project?

Predicative

Predicative questions ask learners to declare what they feel will happen. The technique can be made stronger by asking learners to commit to their answers by writing them down or by saying them aloud, to a partner, a group, or the whole class. Examples: Based on what you know now, what do you think is likely to happen when . . . . . ? At this point in the procedure water enters the system. What will happen with respect to the time for the procedure to be completed?

Organization and valuing

Organization and valuing questions ask learners to:
1. Contrast (How are X and Y different?)
2. Compare (What are the similarities and differences between X and Y?)
3. Order (What is the appropriate sequence of operations that should be used in . . . . . situation?)
4. Prioritize (Which of these two steps is important to do first?)
5. Cluster (Which of these belong together?)
6. Label (What would be an appropriate name for this group of activities?)
7. Hypothesize (Based on what happened, what you would infer about . . . . . . . ?)
8. Predict (If the process runs for another X months, what do you anticipate will occur?)
9. Value (What is important about . . . are important aspects of . . . ?)

**Clarification**

Clarifying questions are used to make the content more specific or clearer. They are often used as follow up questions, and can vary in tone from warm and encouraging to direct and rigorous. Examples: Can you tell me a bit more about . . . . . ? What were the limitations on their data set? How would you describe . . . to a 12 year old (i.e., to client with no background in the subject)?

**Elaborating**

Elaborating questions can be used to engage the learners by allowing them to expand the concept beyond what has been given. Example: What would you add to the comments on the study to expand or generalize the ideas to other settings?

**Summarizing**

Summarizing questions are often useful at the end of a lesson or section. Rather than the instructor summarizing, the idea is to get the learners to pull together the concepts and cull the experience to the most important elements. This approach requires a higher order of thinking by the learners because of the necessary judgment they are required to do.
As well, it can be used as amending group activity. Examples: Based on your experience what are the most important elements in the process? With respect to the replacement of a xxx, what are the key cautions for the person doing the installation.

It is worth concluding with what has been stated by Dawson (1998, p.28) that “lower- order questions ask students to recall, define and describe; that is, to provide facts. Higher-order questions require them to perform interpretive rather than descriptive tasks. They may be asked to analyse, compare, evaluate or synthesise; to rank, hypothesise, design or predict. Good questioning leans towards the open-ended and higher-order forms as much as possible”.

Open questions often begin with the words “what”, “when”, “where”, “why” or “how”. They can ask for an explanation, an elaboration, an example. They can ask to explore strengths and weaknesses or possible problem. They can consider “what if…”. Closed questions usually require a single word or yes/no answer.

The following list offers some examples of different types of questioning, from ones simply requiring answers to those demanding more thought. The list has been adapted from Davis (1993) and McKeachi (1999).

<table>
<thead>
<tr>
<th>Factual or exploratory</th>
<th>Probe facts and basic knowledge and allow little opportunity for dissent e.g. “what” questions or definitions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge</td>
<td>Examine assumptions, conclusions and interpretations.</td>
</tr>
<tr>
<td>Relational or comparative</td>
<td>Ask for comparisons of themes,</td>
</tr>
<tr>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Diagnostic</td>
<td>Probe motives or causes.</td>
</tr>
<tr>
<td>Action</td>
<td>Call for a conclusion or action.</td>
</tr>
<tr>
<td>Connective or causal effect</td>
<td>Ask for causal relationships between ideas, actions or events.</td>
</tr>
<tr>
<td>Extension</td>
<td>Expand the discussion.</td>
</tr>
<tr>
<td>Hypothetical or problem-based</td>
<td>Pose a change in the facts or issues.</td>
</tr>
<tr>
<td>Priority or evaluative</td>
<td>Seek to identify the most important issue, or make a judgment on the relative value of two points being compared.</td>
</tr>
<tr>
<td>Summary</td>
<td>Elicit syntheses.</td>
</tr>
</tbody>
</table>

**2.2.3.8 Engaging the whole class with questioning**

When using questioning with the whole class, it is important that the questions are planned in advance and that you are clear about the purpose. It is also important that the questioning does not carry on for too long and that pupils know this. Questioning can involve and engage even those pupils who can be challenging, provided that it is well planned, of interest and makes them think; they need to see that they will learn something.

**2.2.3.9 Questioning strategies**

**Physical setting**

- It is much easier to ask and answer questions if students can hear and see each other and you. If you can, arrange the chairs into a circle or half circle. Alternatively, arrange the furniture into small groups so students can see each other.
• In a large room, move about the space, and use a roving microphone. If you are stuck up the front of the room it is much more difficult to ask questions that will actually get a response.

Listening skills

Good questioning technique is as much about listening as it is about speaking.
• Listen carefully to what the student is saying. Do not interrupt, even if a student is heading towards an incorrect answer. Interrupting does not create an atmosphere that encourages participation.
• Ask the student for clarification if you do not understand.
• Actually listen as the student is responding. Sometimes tutors are confident that they know the answers themselves so they are not really interested in what students have to say.
• Show that you are listening by maintaining eye contact and nodding.

Wait-time

One factor that can have a powerful effect on student participation is the amount of time a tutor pauses between asking a question and doing something else (e.g. calling on a student or reworking the question). Research on classroom questioning and information processing indicates that students need at least three seconds to comprehend a question, consider the available information, formulate an answer, and begin to respond. In contrast, the same research established that on the average a classroom teacher allows less than one second of wait-time.

• Ask a question and then wait just slightly longer than feels comfortable before moving on to another student or giving a prompt.
• Waiting increases the complexity of the answer, the number of unsolicited responses and the number of questions asked by students.
• Waiting decreases the number of students who fail to respond when called upon.

One questioning technique which is essential to the development of higher thought processes is wait-time. This is the amount of time that elapses between a teacher asking a question and calling upon a student to answer that question. The average teacher’s wait-time is one second!! As cited in Arthur Cavin and Robert Sund, in a research project conducted at Columbia University by Mary Budd Rowe, the following gains were reported when the teachers in the project increased their wait-time:

**Student Responses Lengthen**

1. If you can prolong your average “wait-time” to five seconds or longer, the length of student responses increases. When wait-time is very short, students tend to give very short answers or they are prone to say, “I don’t know.” In addition, their answers often come with a question mark in the tone, as if to say, “Is this what you want?”

**Whole Sentences**

2. You are more likely to get Sentences whole sentences, and the confidence as expressed by tone is higher.

To summarize, an increase in teacher wait-time sets an atmosphere more conducive to productive questions on higher thinking levels. Students also use the wait-time to organize more complete answers. Some guidelines to assist you in using wait-time more effectively are presented below:

1. Increase your wait-time to 5 seconds or longer if needed.

2. Become aware of how long you wait for particular students to respond after your question has been stated. Consciously focus upon increasing your wait time for “slow” or shy students.
3. Avoid asking questions at so rapid a rate that you feel compelled to answer them yourself to move things along.

4. Include types of questions which call upon higher cognitive skills rather than merely rapid-fire memory questions.

5. To encourage students’ participation, periodically ask them to write their answers on a sheet of paper. Then, after they have had time to come up with an answer and write it down, call for volunteers to give their answers.

6. Another method for encouraging participation is the “Think-Pair-Share” technique. Ask a question, and then have the students write down their own answers to the question. After the answers have been written, ask them to pair up with another student and share their answers. This encourages them to talk to each other about differences in their answers and ask further questions about the process/concept which was part of the answer. Pairs can then share their answers with the rest of the class. These may be written on the board or overhead.

**Speculative Thinking**

3. Another bonus that results from increased wait-time is the appearance of speculative thinking (e.g., “It might be the water...but it could be too many plants.”) and the use of arguments based on evidence.

**Shift to Student-Student Behaviors**

4. If the wait-time is prolonged an Student- average of five seconds or more, Student students shift from teacher- Behaviors centered show-and-tell kinds of behavior to student-student comparing of differences.
Students’ Questions Increase

5. As you increase the wait-time, the number of questions students ask and the number of experiments they need to answer the questions multiply.

Teacher’s Flexibility Increase

6. By increasing the wait-time, you buy for yourself an opportunity to hear and to think.

Teachers Revise Their Expectations of Students

7. Wait-time can change your expectations about what some students can do.

Teachers Increase Variety of Their Questions

8. As wait-time increases, teachers variability in the kinds of begin to show much more questions they ask. Students get more opportunity to respond to thought rather than straight memory questions.

Handling student responses

An important aspect of classroom interaction is the manner in which you handle student responses. When you ask a question, students can either respond, ask a question or give no response. If the student responds or asks a question, you can use one of the following recommended questioning strategies: reinforce, probe, refocus or redirect. If the student does not respond you can use either a rephrase or redirecting strategy.

- Positive reinforcement. Praise students for their responses and remember to smile and nod.
- Probe to gain an extended response.
- Redirect. When a student responds to a question or asks a question, you can ask another student to respond. One purpose of this is to enable more students to participate and remove reliance on you as the tutor. This strategy can also be used to allow a student to correct another student’s incorrect response.
Encouraging participation

To encourage students to participate, as a teacher you are required to do the following:

- Speak in a friendly tone of voice.
- Make sure that the question is at a level of abstraction that is suitable for your class.
- Use student names so that you invite them to participate. Ask the question first and then call the student’s name to avoid the rest of the class tuning out.
- Avoid using a pattern when asking questions (i.e. the order of seating or the list of names on the attendance record) as students will only listen when it is close to their turn to answer.
- Avoid repeating student responses. If you repeat what students have said they will listen to you rather to other students.
- Aim to ask questions of all students, not just the confident students or those sitting up the front of the class.
- Give students an opportunity to ask questions. Do not use “any questions?” as your only form of feedback from students. Sometimes students are so confused they cannot even formulate a question.
- In addition, many students will not participate because they do not want to make mistakes in front of their peers.
- Break questions into steps: “what are we going to do first?”, “what do we do next?” If a student struggles with an answer, break the question into simpler parts or give him suggestions rather than just giving up on them.
- Ask a question and allow students time to jot down or discuss the answers.
• Be prepared to investigate alternatives proposed by students. If they are wrong, explore why and how they are wrong. Be interested in divergent views.

• Avoid display questions that give the message: “I know something that you don’t know and you’ll look stupid if you don’t guess right”.

2.2.3.10 Classroom tactics for effective questioning

The way questions are asked is central to their effectiveness. All pupils, including challenging ones, respond well to teachers who show an interest in them and in their opinions and ideas. The way you ask a question or listen to a response is vital. Good questioners tend to show genuine curiosity in the way they ask questions, inviting learners to think with them. The way in which you respond to students’ answers is also crucial. The following tactics are required for effective questioning:

Creating a climate where students feel safe to make mistakes: This is very important if students are going to build the confidence to speculate and take risks. Some teachers use small whiteboards for students’ answers to simple questions. All students write the answer at the same time and hold it up so that the teacher can see. This avoids making students feel vulnerable. It is important that students’ contributions are listened to and taken seriously by both the teacher and the class. You should model this by ensuring that you make appropriate responses to contributions and are not critical. It is also important that you do not allow the class to ridicule wrong answers. Boys in particular do not like to be shown to be wrong. You could also model making mistakes yourself to show that being wrong is acceptable.

Using a ‘no-hands’ rule: This tactic can contribute to creating a supportive classroom climate. It ensures that all students are likely to be asked for a response and makes the questioning process more inclusive. If
you only ever ask people with their hands up, it limits who is included and can leave some students disengaged from the process. The ‘no-hands’ tactic also lets you direct questions where you want and to pitch a question at the appropriate level to extend the student you are asking. If you are asking conscripts rather than volunteers, you need to have a range of back-up strategies if the student is unable to answer. Such strategies could include allowing them to say ‘pass’ or to seek help from a friend.

**Probing:** When students respond to a question, probes are useful follow-ups and can be used to seek more information, to clarify responses or to get students to extend their answers. Questions such as ‘Can you tell me more about that?’ or ‘What do you think the next step would be?’ are probes that can move students’ thinking on.

**Telling students the big question in advance:** This helps to reinforce the main ideas and concepts and gives students time to prepare for the question as they work through the lesson. You could also provide signals to help students recognize the range of possible responses to the question being asked and to help them to select the most appropriate one.

**Building in wait time:** Research suggests that if the teacher waits about 3 seconds, both before a student answers a question and also before speaking after the answer, there are substantial benefits in the classroom. It is likely to:

- encourage longer answers;
- encourage a greater number and variety of responses;
- encourage more confidence and ‘risk taking’;
- encourage students to ask questions in return.

**Allowing time for collaboration before answering:** Asking pairs of students to consider the question for a set period of time before seeking answers leads to more thoughtful and considered answers. It can also
promote engagement by giving students a very immediate context for their work.

**Placing a minimum requirement on the answer:** Saying something like ‘Do not answer this in less than 15 words’ will begin to produce longer responses.

**Dealing with answers:** Dealing well with students’ answers is a very important aspect of effective questioning. The overuse or inappropriate use of praise should be avoided and students should be made aware if their answer is not correct. This is particularly true if the answer reveals misconceptions.

**If the answer is correct:** You must acknowledge this but you should avoid effusive praise. If the answer is a particularly good one, you might indicate why it is so good or ask other students what they think. If the student is hesitant, he will need a greater degree of affirmation than someone who is confident in the answer.

**If the answer is incorrect:** If this is because of a lack of knowledge or understanding, you could simplify the question or provide a series of prompts to encourage the student to try a better answer. If this doesn’t work, then you could try to clarify the underpinning knowledge or provide a partly correct answer for them to try completing. This can help to clarify misconceptions and can also involve other students in the discussion.

**If the answer is partly correct:** You should acknowledge the parts which are correct and then use prompts to deal with the incorrect parts.

**If an answer is a result of speculation:** You should accept all answers as being of equal worth. Then collaborate on finding which are more likely to be correct. The way you ask the question in the first place should indicate that all answers are acceptable at this stage. Asking, at the start of an investigation, ‘What factors *might* affect the rate of
photosynthesis?’ is much better than ‘What factors affect the rate of photosynthesis?’

2.2.4 Debate

Debates can provide students the opportunity to synthesize course information, conduct related outside research, improve critical thinking and understanding, and develop verbal communication skills. Debates are an extremely flexible teaching tool. When debate topics are sufficiently scoped, students are encouraged to tie together the major concepts of the course as they prepare their debate position. Debates have the ability to reinforce and enhance knowledge in a topic area, to engage students in the learning process, to verify that students have the ability to analyze, incorporate, and apply literature to various situations, to heighten organization and listening skills, and to boost confidence when challenged on issues by others.

2.2.4.1 What is meant by the term ‘debate’?

Reinking (2000) defined debate as

“a formal contest of argumentation in which two opposing teams defend and attack a given proposition”. Although debate is an excellent activity for developing critical thinking, its weakness is that it can turn argument into a game of winners and losers rather than a process of cooperative inquiry (p.4).

Debate or "stressing" is a method of interactive and representational argument. Debate is a broader form of argument than logical argument, which only examines consistency from axiom, and factual argument, which only examines what is or isn't the case or rhetoric which is a technique of persuasion. Though logical consistency, factual accuracy and some degree of side emotional appeal to the audience are important elements of the art of persuasion, in debating, one often prevails over the other side by presenting a superior "context" and/or framework of the
issue, which is far more subtle and strategic. In a formal debating contest, there are rules for people to discuss and decide on differences, within a framework defining how they will interact. Informal debate is a common occurrence, the quality and depth of a debate improves with knowledge and skill of its participants as debaters.

Debates have been defined as an educational strategy that fosters good reasoning and critical thinking, as well as heightens awareness of attitudes, values, and beliefs. As explained by Hall (2011,p.2) that in traditional classroom setting, a large percentage of what students are taught occurs via the lecture format. However, with debates, students must go beyond the passive nature of the lecture format to the dynamic nature of debating. Whereas, the lecture format allows students to receive and respond to instruction, debates require students to actively engage in the multidimensional teaching and learning of a topic area. Debating is dynamic because students must be thoroughly prepared to advocate their stance while at the same time simultaneously acknowledge the opposition’s arguments, plan counter-arguments, and refute the opposition’s claims with a logical line of thought. This activity of being able to consider the evidence, in different ways and under different conditions, helps to develop and promote understanding and critical thinking in students. Hence, debates move students beyond the memorization superficial application of theories, techniques and evidence to actively integrating and applying classroom materials under an array of situations and circumstances. There are negative facets to debate. Preparation can be labor intensive and daunting and may be a source of frustration on the part of students. To minimize this frustration, the instructor should assure that students have adequate time to prepare or schedule debates during non-heavy test/assignment times. Because arguments in debates are either for or against, it is believed that debate
will only argue the extremes and minimize the multifaceted aspects associated with a topic.

2.2.4.2 Debate preparation

Since debate is a persuasive argument, active listening is critical to the success of a debate. Debating would be futile if the class was not aware of strategies used to sway the audience’s opinion. Recognizing these tactics allows students to address these antics accordingly as a defense during the debate. Hence, before students participate in a debate, they are given number of hours of interactive instruction in the basics of critical thinking, problem solving, and debate. Introduction to critical thinking includes logic topics such as propositions, probabilities, errors in reasoning, propaganda techniques, and value judgments. A discussion on the errors in reasoning includes faking a connection, detecting double standards, and jumping to conclusions. Moreover, students are challenged to recognize and categorize various propaganda techniques seen on regular basis.

Next students engage in a discussion on problem solving skills that includes an understanding of the scope of the problem, analysis/synthesis, types of propositions, skills of research, and skills of reasoning. Skills of reasoning include the use of analogy and linkage as a means of understanding and solving a problem. Students are taught to differentiate in three types of propositions and their value within a debate. A proposition of fact is not debatable because it is fact and can be easily researched for the truth. A proposition of value is difficult to debate because it draws on personal values and beliefs that are not consistent from one individual to the next. Lastly, there are policy propositions, which are traditionally easily debated because they seek to change current policy.
To conclude the preparations, students are given a cursory explanation of debate fundamentals, construction, etiquette, and execution. Fundamentals of debate include an understanding of burden of proof, the stock issues and the flow of argument. The structure of each debate consists of four speeches; first constructive, second constructive, rebuttal and the cross-examination. Students are taught the value and importance of each speech. Constructive speeches attempt to develop arguments to convince the audience that change is necessary or that the status quo is sufficient. The first affirmative speech is the only speech that can be prepared in advance as it establishes the necessity to change policy and does not need to address the oppositions’ argument as that argument has not yet been proposed. The rebuttal is the closing speech that attempts to counter the opponents’ claims while continually supporting one’s own stance. Consequently, no new arguments can be presented or established in the rebuttal. Lastly cross-examinations are used to provide clarity, find weakness in the oppositions’ claim, expose errors and contradictions, and set-up arguments for subsequent speeches. Students are given two minutes between constructive speeches and cross-examinations to regroup and discuss strategy to counter the oppositions’ points while advancing their plan. To diversity the learning experience, students are not allowed to repeat a speech in subsequent debates. For example, if a student presented the affirmative rebuttal in the previous debate, he/she was not allowed to present the negative rebuttal for another debate. The student must become the cross-examiner or present one of the constructive speeches.

2.2.4.3 Strategies for assigning debate positions

After a debate topic is assigned, there are several strategies that can be used to assign affirmative and negative debate positions to each team. There are three possibilities provided by Alford (2002, p.3-4):
Assign Debate Position Initially

Under this scenario, students receive their affirmative or negative debate position at the same time they receive their debate topic assignment. For example, a computer science programming language debate topic could be assigned as follows: "Be prepared to effectively argue FOR the position that ‘Ada should replace Java as the standard language in undergraduate computer science programs’.

This strategy has the potential to save students’ time because they will only have to thoroughly prepare half of the debate topic. The main disadvantage of this strategy is that it does not adequately encourage students to evaluate and critically think about both sides of the question under consideration.

Assign Debate Position Later

With this strategy, instructors do not reveal to debate teams whether they will be arguing the affirmative or negative side of their specific debate question. With this strategy, the computer science programming language debate topic would be assigned as follows: "Be prepared to effectively argue FOR or AGAINST the position that ‘Ada should replace Java as the standard language in undergraduate computer science programs.’

When using this strategy, it is recommended that you inform students of their debate position anywhere from several days to several weeks before the debate, depending on your situation. This strategy has the advantage of encouraging students to honestly evaluate and prepare arguments both for and against the question under debate. It has the possible disadvantage, though, of encouraging students to procrastinate, if they hope they can wait until they find out their specific position before they begin serious preparation. This disadvantage can be partially ameliorated by not revealing in advance the exact date when debate positions.
Assign Position “at” the Debate

The last and clearly most difficult strategy, but also potentially the most rewarding for students, is to assign the debate topic and wait until the date of the debate itself before announcing affirmative and negative positions. The amount of advance notice can vary from a minimum of 30 minutes to several hours based on the difficulty of the topic and student circumstances. The computer science programming language debate topic could be assigned as follows: "Be prepared to effectively argue FOR or AGAINST the position that ‘Ada should replace Java as the standard language in undergraduate computer science programs.” You will be assigned your debate position one hour prior to the beginning of the debate. Like the strategy previously discussed, this strategy encourages students to seriously evaluate the entire debate topic. It has the added advantage of requiring students to prepare initial argument positions for both sides of the question, and it substantially reduces the incentive for students to procrastinate their preparation. The primary disadvantages of this strategy are that it requires substantially more student preparation time, and student team members may not have similar class schedules that will enable them to meet and prepare on the actual day of the debate.

Finally, debate is a competition of persuasion; Thus, each debate has a winner and a loser. Hence, the thought of losing the debate can create angst for some students. This can be defused by explaining to students that debate is a learning experience and not a test of knowledge gained. Thus, the process of preparation, anticipation and participation should be emphasized rather than the competition and the grade.

2.2.4.4 The general structure of the debate

The general structure of the debate (without cross-examination) as provided by Alford et al. (2002, p.3-4) can be as follows:
• A coin toss immediately prior to the debate determines which team began the debate.
• The team that wins the coin toss begins with five minutes for stating an opening position.
• The other side then has 3 minutes to present their opposing position.
• The original side receives 2 minutes for rebuttal.
• The other side then receives one minute for counter-rebuttal.
• The timing for the next round is the same as the first except that the teams switch the order of their presentations.

Two possible debate formats are shown at Figures 2 (without cross-examination) and 3 (with cross-examination).

Both formats are designed to take the 15 minutes for one round, and it is recommended that a classroom debate consists of two rounds that usually leave sufficient time for discussion and audience comments. Because of the public nature of the debate, students were well prepared for the debate. Reference material was provided in the department library for student use. Students were also encouraged to do outside research as well. The students’ level of preparation for the debate was well in excess of their level of preparation for most classes during the semester.

<table>
<thead>
<tr>
<th>Possible Debate Format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(No cross-examination)</strong></td>
</tr>
<tr>
<td>1. 5 minutes to state position</td>
</tr>
<tr>
<td>2. 3 minutes for counter position</td>
</tr>
<tr>
<td>3. 2 minutes for rebuttal</td>
</tr>
<tr>
<td>4. 1 minute for counter rebuttal</td>
</tr>
</tbody>
</table>

Switch teams and repeat
The debate began with both sides attempting to define intelligence [1] and learning [2] in such a way that it set the stage for their later positions. The debate quickly moved on to the Turing Test [3] and Searle’s Chinese Room anecdote [4, 5]. It was gratifying to see the other group of students counter the Chinese Room argument with Church lands’ Luminous Room argument [6]. At this point it is important to note that none of these papers was “assigned” reading. The debate format had enticed the students to read and study them on their own. At this point, the debate focused on whether creating a thinking machine is possible, not whether the goal of AI should be a thinking machine. In several iterations of The Great AI Debate, the debate rapidly moves down one of two:

- Scare tactics on the part of the negative position about machines taking over the world and determining that people are no longer needed,
- Metaphysical arguments that the goal itself drives innovation and progress even if it is never reached.

The debate usually concludes with the group that is debating in favor of this goal illustrating many possible benefits of thinking machines to mankind. It is interesting to hear how many innovative ideas 21-year-olds can dream up in support of this argument. At the same time, the group arguing against the proposition refutes that any of these proposed applications involves real thinking. The debate concludes with each team being given three minutes for closing remarks. When the last speaker has presented the team’s closing remarks, the audience can be asked to vote for which team presented the most convincing argument, if desired. Grades for classroom debates can be based on numerous factors, such as
preparation, organization, quality of arguments, presentation, continuity between team members, etc.

**Possible Debate Format**

*(With cross-examination)*

5. 5 minutes to state position
6. 3 minutes for counter position
7. 2 minutes for cross-examination
8. 2 minutes for cross-examination
   
   Switch teams and repeat

**Figure 3. Debate Format (with cross-examination)**

### 2.2.5 Indicators of dialogic teaching

The quality of classroom talk depends on many factors: the speaking and listening skills of learners and teachers, teachers’ subject knowledge (for taking learner’s thinking forward requires a clear conceptual map of the directions which that thinking should take), classroom climate, classroom organisation, and so on. Alexander (2008) has shown that these indicators are placed in two groups. The first group deals with the wider context within which dialogic teaching is placed. The second group lists some of the main properties of the talk which provides the core of dialogic teaching.

**Dialogic teaching is facilitated and supported when:**

#### 2.2.5.1 Contexts and conditions

Dialogic teaching is facilitated and supported when:

- Different organizational settings and tasks - whole class, collective group, collaborative group, and individual – are deployed to meet different educational goals.
• Teachers are prepared to change classroom layout to meet the requirements of different kinds of learning task and different kinds of learning talk.
• When concentration is required, distractions and interruptions are kept to a minimum.
• Lesson introductions, transitions and conclusions are economically managed, and care is taken to avoid letting lesson episodes (especially writing tasks) extend beyond (a) the time they need, and (b) the learner’s concentration span.
• Lesson introductions and conclusions are long enough to make a difference, and are, as far as possible, concerned with ideas rather than procedures.
• Tasks are planned with an eye to their potential to provoke and benefit from talk-based as well as text-based and written activities; and ‘now let’s talk about it’ becomes as familiar as ‘now let’s write about it’.
• Time is viewed as a precious resource and there is close attention to time on task.
• Teaching demonstrates pace in terms of the cognitive ground it enables pupils to cover, not merely in the speed of its organisation or interaction.
• Teachers seek to shift from interactions which are brief and random to those which are longer and more sustained.
• The traditional ratio of written to oral tasks and activities is adjusted to give greater prominence to the latter than hitherto.
• Relatedly, more and better use is made of oral assessment, and teachers become as skilled in assessing children’s understanding on the basis of what they say as by checking what they write.
• Teachers are sensitive to the way their expression, gesture, body language, physical stance and location in the classroom can affect the type and quality of classroom talk.

• Teachers work with their pupils to develop: a rich and discriminating vocabulary; the ability to speak confidently, clearly, informatively, expressively and succinctly; the capacity to engage with and communicate in, different registers and genres; the ability – and will – to listen.

• Teachers recognize that in all aspects of classroom talk they themselves are influential models, and where appropriate they make the modeling process an explicit one.

2.2.5.2 Characteristics of dialogic teaching

Dialogic teaching is indicated by:

1. Teacher-student interaction (for example in whole class and collective - teacher-led - group settings) in which:

• Questions are structured so as to provoke thoughtful answers, and - no less important -

• Answers provoke further questions and are seen as the building blocks of dialogue rather than its terminal point;

• Individual teacher – student and pupil-pupil exchanges are chained into coherent lines of enquiry rather than left stranded and disconnected;

• There is an appropriate balance between the social and the cognitive purposes of talk, or between encouraging participation and structuring understanding;

• Students – not just teachers - ask questions and provide explanations, and they are encouraged to do so;
• Turns are managed by shared routines rather than through high-stakes competitive (or reluctant) bidding;
• Those who are not speaking at a given time participate no less actively by listening, looking, reflecting and evaluating, and the classroom is arranged so as to encourage this;
• All parties speak clearly, audibly and expressively;
• Children understand that different school subjects and social circumstances demand different registers and they learn how to use them;
• Students have the confidence to make mistakes, and understand that mistakes are viewed as something to learn from rather than be ashamed of;

2. **Student-student interaction (for example, in collaborative group settings) in which:**
   • Students listen carefully to each other;
   • They encourage each other to participate and share ideas;
   • They build on their own and each others’ contributions;
   • They strive to reach common understanding and agreed conclusions, yet
   • They respect minority viewpoints.

3. **Teacher-student one-to-one monitoring which:**
   • lasts for long enough to make a difference;
   • is instructional rather than merely supervisory;
   • Provides diagnostic feedback on which learners can build.

4. **Questioning (whether in whole class, group or individual interactions) which:**
   • is anchored in the context and content of the lesson;
   • builds on previous knowledge;
• elicits evidence of children’s understanding;
• Appropriately combines invitations for closed / narrow and open / discursive / speculative responses (what is? and ‘what might be?’ questions);
• combines the routine and the probing;
• uses cued elicitations and leading questions sparingly rather than habitually;
• prompts and challenges thinking and reasoning;
• balances open-endedness with guidance and structure in order to reduce the possibility for error;
• Achieves consistency between its form and intent (e.g. where questions are questions rather than instructions, and open questions are genuinely open, rather than invitations to guess the one ‘right’ answer).

5. Responses to questioning which:
• address the question in the depth it invites rather than worry about spotting the ‘correct’ answer;
• Move beyond yes/no or simple recall to extended answers involving reasoning, hypothesizing and ‘thinking aloud’;
• Are, where appropriate, considered and discursive rather than brief and prematurely curtailed.

6. Feedback on responses which:
• Replaces the monosyllabically positive, negative or non-committal judgment (e.g. repeating the respondent’s answer) by focused and informative diagnostic feedback on which pupils can build;
• Uses praise discriminatingly and appropriately, and filters out the merely phatic ‘wow’, fantastic’, ‘good boy’, ‘good girl’, ‘very good’, ‘excellent’ etc;
• keeps lines of enquiry open rather than closes them down;
• Encourages children to articulate their ideas openly and confidently, without fear of embarrassment or retribution if they are wrong.

7. Students talk: through which they
   • narrate
   • explain
   • instruct
   • ask different kinds of question
   • receive, act and build upon answers
   • analyse and solve problems
   • speculate and imagine
   • explore and evaluate ideas
   • discuss
   • argue reason and justify
   • negotiate. (P.40-44)
Chapter Three
Methodology
Chapter Three
Methodology

3.0 Introduction
This chapter presents and describes the methods used in collection of primary and secondary data required in attempt of answering the objectives of the study. The study analyzes and interprets the findings in terms of the knowledge in the literature review as well.

3.1 Research design
This research is a descriptive analytical research.

3.2 Area of the Research
The research was conducted in different Sudanese Universities and colleges including Al-Fashir University, Faculty of Arts & Education English Language Department.

3.3 Population and sample,
The study populations were students of 2-4 year in English department, Faculties of Arts, Education, and other technical colleges at different Sudanese universities, they were males and females.

3.4 Sample size
Sample size of this study consisted of 60 students (for questionnaire), 40 lecturers (for interviews) and 40 students for the observational check list (classroom debate activity).

3.4.1 Inclusion criteria – Only students of 2-4 years who studied debate techniques and skills were purposely selected to respond to the questionnaire.

3.4.2 Exclusion criteria – students of other classes who did not study debate techniques and skills.

3.5 Data collection instrument and Instrumentation
Primary data had been collected by using three tools:
1/ Questionnaire
A structured self administered questionnaire was used to collect primary data from participants (60 students). The questionnaire contains 20 closed ended statements with the same answering option.

The questionnaire was filled by students from the following universities:

2. Observational check list
   Observational check list was used for two groups of respondents:
   Group (A) control group: consisted of 20 students at 3rd year.
   Group (B) Experimental Group: Also consisted of 20 students at 3rd year (semester 6) who studied the skills and techniques of debates. The forty students were from Al-Fashir University.

3. Interviews
   Interviews were used with 40 English Language lecturers, assistant prophesiers, and prophesiers from different Sudanese Universities.
   Teachers from English departments who responded to the interview were from the following universities:
   1. Omdurman Islamic University – College of Education – College of Arts
   2. Al Imam Elhadi College
   3. Al Neelain University - College of Arts
   4. University of Khartoum – College of Education
   5. Sudan International University
   6. Kasala University – College of Education
   7. Al Ahlia University
   8. Ahfad University for Women
   9. National Ribat University – College of Languages & Translation
   10. University of Sciences & Technology
   11. International University of Africa – College of Arts
   12. Sudan University for Sciences & Technology
13. Al-Fashir University.

3.6 Data collection method/ procedure
The data for this study were collected through questionnaire and interviews during the period from 6/5/2013 up to 13/6/2013. The observational check list was conducted through the participation of the selected students in the classroom debate. The questionnaire was distributed to 60 students who had been introduced to debate skills and techniques and who participated in the international debate or debates held at their colleges. With the help of one of the lecturers, the researcher met the selected students and explained to them the purpose of the questionnaire. Then, the questionnaire was distributed to those who agreed to respond to it. Twenty students from colleges of Education and Arts as control and experimental groups with the intervention for experimental group. The two groups participated separately in a classroom activity and the performance of the two groups was evaluated and compared. As for the interview, it was conducted with 40 English language lecturers who were available during data collection and who accepted to be interviewed.

3.7 Data Analysis
For analyzing the collected primary data, two methods were used:

1- Quantitative analysis was used for analyzing the data collected through questionnaire and check list. The analysis was done by using the statistical package for social science (SPSS) program and the results were represented in the form of frequencies and percentage tables and figures.

2- Qualitative analysis was used for analyzing interviews, where interviews, ethnographies and documents are the typical sources of qualitative data which can be captured on audio recording or video, cameras, charts and most commonly textual transcriptions. These
texts, documents and recordings are analyzed for their meaningful content and they are interpreted rather than counted or measured.

3.8 Ethical considerations

The basic concepts of ethics were duly observed in the conduct of this study on the part of the researcher and the principles of autonomy. Ethical clearance and approval to conduct this research was obtained from the Research. A written letter of permission to carry out the study was submitted to the deans of the colleges along with a copy of the proposal and the data collection tool. The application was approved by the ethical committee of the institution.

The concept of individual autonomy was upheld in this study. All participants were approached with respect and honour. Their participation in the study were solicited, after a verbal consent to participate, an introductory letter carefully as an evidence of voluntary participation after they have understood the purpose of the research. No individual was coerced, induced or deceived to participate in the study. Participants in the study were assured of the protection of their identity. All participants have the right not to answer any part of the questionnaire if they consider it will have an adverse effect on them. Privacy and dignity were ensured in this study.

3.9 Validity and reliability

The design of the instrument was guided by findings from the literature. The content validity of the questionnaire was ensured by using standardized tools as a guide while preparing the questionnaire and through consultation with my supervisor. The tool was reviewed by my supervisor; it was later given to seven experts in this field from three universities. The instrument was prepared using simple words that are easy to understand, difficult technical terms were avoided as much as it is possible. The questionnaire was pre-tested and refined according to feed
back from those who participated in the pre-testing. Conducting the pre-
testing of the questionnaire thus helped in making the necessary
corrections and solving the emerging problems to improve the data
collection process, this ensured the reliability of the instrument because
the participants were given the opportunity to comment on the clarity of
the questions and they were requested to make suggestions.
Careful phrasing of each question to avoid ambiguity ensures reliability
of the tool. Respondents were informed of the purpose of the research and
the need to respond truthfully and their consent to respond to the
questionnaire was obtained verbally.
Chapter Four
Data Analysis and Discussions
Chapter Four

Data analysis and discussions

This chapter consists of three sections. The first section is concerned with the analysis and discussion of the data obtained from students' questionnaire. The second section presents the analysis and the results of the performance of the control group and experimental group in a classroom debate activity. The third section deals with the English language lecturers' responses to the interview which was designed to get their viewpoints on the influence of dialogic teaching on the development of the learners' speaking skills and thinking.

4.1 Analysis and discussion of students' questionnaire

Table (1) Dialogic teaching enhances the learners' skills of speaking

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>36</td>
<td>60.0</td>
</tr>
<tr>
<td>Agree</td>
<td>22</td>
<td>36.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of table (1) showed that the great majority of respondents (96%) either strongly agreed (60%) or agree (36%) that dialogic teaching enhances the learners' skills of speaking; only 3.3% were neutral. According to the researcher's viewpoint, this high percentage indicates the effectiveness of dialogic teaching enable the learners to value the difference between dialogic teaching and didactic teaching. In addition, it may refer to the fact that this type of teaching maximizes students' talking time which in turn enhances their speaking skills.
Figure (1) Dialogic teaching enhances the learners' skill of speaking

Table (2) Dialogic teaching provides learners with a chance to take an active part in classroom discourse

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>31</td>
<td>51.7</td>
</tr>
<tr>
<td>Agree</td>
<td>25</td>
<td>41.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In the above table, 51.7% of respondents strongly agreed that dialogic teaching provides learners with a chance to take an active part in classroom discourse, 41.7% of them agreed; only 6.7% of them were neutral. Since in dialogic teaching students will have the chance to perform activities such as narrating, explaining, asking different questions, analyzing and solving problems, exploring and evaluating ideas, discussing and arguing, then they are playing an active role in
classroom discourse. The statement has been emphasized by this high percentage.

Figure (2) Dialogic teaching provides learners with a chance to take an active part in classroom discourse

![Graph showing percentage of agreement](image)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>23</td>
<td>38.3</td>
</tr>
<tr>
<td>Agree</td>
<td>24</td>
<td>40.0</td>
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<tr>
<td>Neutral</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>Disagree</td>
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<td>1.7</td>
</tr>
<tr>
<td>strongly disagree</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table (3) Dialogic teaching develops the learner's thinking

In table 3, 40% of respondents agreed that dialogic teaching develops the learner's thinking, 38.3% of them strongly agreed, 16.7% of them were neutral, only 5% of them were either strongly disagree or disagree. This proves that dialogic teaching can give students the opportunity to extend their talk and their thinking. As the task progresses, students will hopefully build on their own and others' ideas, and chain them into coherent lines of thinking and inquiry in a cumulative way. This thinking
occurs as a result of social interaction. Through exchanging ideas, learners are exposed to various concepts and perspectives that challenge or elaborate their own world-view which requires them to voice their views, provide justification for arguments, question assumptions and clarify concepts.

**Figure (3) Dialogic teaching develops the learner's thinking**

![Graph showing the distribution of responses to the statement: Dialogic teaching develops the learner's thinking.]

**Table (4) Dialogic teaching develops the learner's ability of reasoning**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>17</td>
<td>28.3</td>
</tr>
<tr>
<td>Agree</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of table (4) showed that 40% of respondents strongly agreed that Dialogic teaching develops the learner's ability of reasoning, 28.3% of them agreed, 10% of them were neutral, only 6% of them disagreed. The development of the learners' of reasoning can be achieved through mastering argumentation skills.
Figure (4) Dialogic teaching develops the learner's ability of reasoning

In the above table, more than half of respondents (58.3%) strongly agreed that 'through dialogic teaching the learner may develop the skill of dialogue', 26.7% of them agreed, 6.7% of them were neutral and disagreed respectively, and only one strongly disagreed. This is typically what happens when dialogic teaching is adopted because all students will have a chance to participate because they will be working in groups.
which leads to an effective relationship and intimacy among the classmates. Since there is no absolute ignorance and no absolute wisdom, students are cooperating with each other in a shared reality and with the help of each other create something more than their own personal action.

Figure (5): Through dialogic teaching the learner may develop the skill of dialogue

Table (6) Using the technique of dialogue in teaching provides the learners with opportunity to speak to each other

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>34</td>
<td>56.7</td>
</tr>
<tr>
<td>Agree</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in table (6), more than half of the respondents (56.7%) strongly agreed that using the technique of dialogue in teaching provides the learners with opportunity to speak to each other, 30% of them agreed, 8.1% of them were neutral, 3.3% of them disagreed and only one respondent strongly disagreed. This high percentage of agreement to the statement (86.7%) emphasizes the importance of dialogue in developing
learners' thinking and speaking skills based on the fact that the concept of dialogue, itself, establishes the existence of the other person who cannot be excluded because meanings are created in processes of reflection between people. In addition, dialogic interactions are based on equality of participants and seek understanding through speakers appreciating the provided arguments to the dialogue.

**Figure (6)** Using the technique of dialogue in teaching provides the learners with opportunity to speak to each other

![Graph showing the frequency and percent of learners' responses to using the technique of dialogue in teaching](image)

**Table (7)** Using the technique of dialogue in teaching provides the learners with opportunity to listen to each other

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>Agree</td>
<td>23</td>
<td>38.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Results of table (7) showed that 38.3% of the respondents agreed that using the technique of dialogue in teaching provides the learners with opportunity to listen to each other, 30% of them strongly agreed, 25% of them were neutral, 5% of them disagreed and only one respondent strongly disagreed. As shown in results, 68.3% of respondents agreed with this assumption. This indicates that dialogue is an effective technique in promoting learners' speaking skills and thinking if we consider that in any dialogue the person we are speaking to, the "addressee", is always already there at the beginning of the utterance just as we are there already on the inside when the addressees frame their reply to us.

**Figure (7) Using the technique of dialogue in teaching provides the learners with opportunity to listen to each other**
Table (8) Using the technique of dialogue in teaching provides learners with opportunity to share ideas

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>27</td>
<td>45.0</td>
</tr>
<tr>
<td>Agree</td>
<td>24</td>
<td>40.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In the above table (8), results showed that the majority of the respondents (85%) were either (agree 45%) or (strongly agree 40%) that using the technique of dialogue in teaching provides learners with opportunity to share ideas, 8.3% of them were neutral, 5% of them disagreed and only one respondent strongly disagreed with this assumption.

Figure (8) Using the technique of dialogue in teaching provides learners with opportunity to share ideas
Table (9) Dialogic teaching develops the learner's debating skills

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>33</td>
<td>55.0</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in table (9), more than half of the respondents (55% strongly agreed that Dialogic teaching develops the learner's debating skills, 33.3% of them agreed, 10% of them were neutral and only one respondent strongly disagreed.

Figure (9) Dialogic teaching develops the learner's debating skills
Table (10) Debates in the classroom can serve as an innovative teaching tool

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>13</td>
<td>21.7</td>
</tr>
<tr>
<td>Agree</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

When discussing results of the above table, it is clearly observed that 43.3% of the respondents agreed that debates in the classroom can serve as an innovative teaching tool, 25% of them were neutral, 21.7% strongly agreed, 8.3% of them disagreed, and only one respondent strongly disagreed. In spite of the variant percentage of the responses to this statement, using debate as a teaching tool will provide students with the ability to communicate successfully and think critically. In addition, formal debates in the classroom serve as an innovative teaching tool in the educational process. For the teachers, debates serve as an opportunity to evaluate whether students comprehend and are able to apply major concepts of the profession that might otherwise be difficult to assess. When debates are used as a teaching tool, they provide students the opportunity to synthesize course information, conduct related outside research, improve critical thinking, and develop verbal communication skills. Debates are an extremely flexible teaching tool. When debate topics are sufficiently scoped, students are encouraged to tie together the major concepts of the course as they prepare their debate positions.
Figure (10) Debates in the classroom can serve as an innovative teaching tool

Table (11) Debates in the classroom can serve as an innovative learning tool

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As shown in the above table, the highest percentage (33.3%) of the respondents were neutral, 31.7% of them agreed that debates in the classroom can serve as an innovative learning tool, 25% of them strongly agreed, while 10% of them disagreed with the mentioned assumption. Traditionally, it is clear that in the charge of talk, learners are given no opportunities to discuss work with their peers. To overcome this passivity and engage students in active classroom interactions, most of the
respondents thought that this could be done through using debate as a tool of learning. These responses support the idea that debate is an experiential learning process that allows students to demonstrate their communication ability while presenting reasonable arguments based on evidence. Using debates as an innovative learning tool, debates require active involvement in the learning process, integration of previously taught material, development of problem-solving skills, organization and teamwork. When debates are used as learning tool, they help students organize and synthesize information, encourage students to learn on their own, increase students cooperation skills and improve verbal skills.

**Figure (11) Debates in the classroom can serve as an innovative learning tool**
Table (12) Debates improves the learner's verbal skill

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>27</td>
<td>45.0</td>
</tr>
<tr>
<td>Agree</td>
<td>22</td>
<td>36.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In table (12), less than half of the respondents (45%) strongly agreed that debates improve the learner's verbal skills, 36.7% of them agreed, 11.7% of them were neutral, 5% disagree, and only one respondent strongly disagreed. These responses emphasizes that debates have the ability to reinforce and enhance knowledge in a topic area, to engage students in the learning process, to verify that students have the ability to analyze, incorporate, and apply the literature to various situations, to heighten organization and listening skills, and to boost confidence when challenged on issues by others.

Figure (12) Debates improve the learner's verbal skills
Table (13) Dialogic teaching enhances the learner's argumentation skills

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>24</td>
<td>40.0</td>
</tr>
<tr>
<td>Agree</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of table (13) have shown that the majority of respondents (83.3%) stated that Dialogic teaching enhances the learner's argumentation skills (43.3% agreed and 40% strongly agreed), 11.7% of them were neutral, 3.3% of them strongly disagreed and only one respondent strongly disagreed. Argumentation is seen as a social process, where co-operating individuals try to adjust their intentions and interpretations by verbally presenting a rationale for their actions.

Argument is not a matter of fist-banging or of win-lose debate, but a matter of finding the best solution to a problem or issue. To develop the skills of argument, it is essential to consider the purpose of argument which is confined to truth seeking as well as persuasion. Talking about ideas in small groups is helpful in developing argument skills. The greatest power of groups is their ability to generate ideas and present us with multiple perspectives.
Figure (13) Dialogic teaching enhances the learner's argumentation skills

Table (14) Argumentation promotes high-level of thinking

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>30</td>
<td>50.0</td>
</tr>
<tr>
<td>Agree</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As shown in the above table, half of the respondents strongly agreed that argumentation promotes high-level of thinking, 26.7% of them agreed, 15% of them were neutral, 5% of them disagreed, and only 3.3% strongly disagreed.

Argument is effective in developing learners' thinking if it is conducted on a controversial topic area that gives rise to differing points of view. Because argument is a claim supported by reasons which in turn
are supported by evidence or chains of further reasons, it contributes much to the development of learners' thinking.

**Figure (14) Argumentation promotes high-level of thinking**

![Bar chart showing the distribution of responses to the belief that argumentation promotes high-level of thinking.](image)

**Table (15) Through dialogic teaching, the learner can develop the skill of questioning**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

In table (15), the majority of the respondents (76.6%) believed in dialogic teaching method in developing questioning skill of the learners, (43.3% strongly agree and 33.3% agree), 16.7% of them were neutral, 5% of them strongly disagreed and only one respondent strongly disagreed.
Through dialogic teaching, the learner can develop the skill of questioning

![Bar chart showing percent distribution of responses to classroom questioning]

**16/ Classroom questioning develops the learner's critical thinking skills**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Agree</td>
<td>33</td>
<td>55.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of table (16) showed that the majority of respondents (86.7%) agreed that classroom questioning develops the learner's critical thinking skills (55% agree, and 31.7% strongly agree), 8.5% of them were neutral, while 5% of respondents did not agree with the mentioned assumption. Questioning is a good means of developing learners' speaking skills and thinking as stated by some respondents. But they thought that the effectiveness of questioning is always reduced by restrictions such as the fear to give wrong answers, being afraid of the teacher's feedback and waiting until allowed to speak. In spite of these restrictions, questioning
contributes to the development of learners' thinking if they are used to
guide the development of understanding.

**Figure (16) Classroom questioning develops the learner's critical
thinking skills**

![Bar chart showing the frequency and percent of responses to the statement: Classroom questioning develops the learner's critical thinking skills.]

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of the above table (17) showed that 43.3% of respondents
strongly agreed that dialogue is the most effective component of dialogic
teaching, in addition, 31.7% of them agreed, 13.7% of them were neutral,
10% of them disagreed, and only one respondent strongly disagreed.
Figure (17) Dialogue is the most effective component of dialogic teaching

18/ Debate is the most effective component of dialogic teaching

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>14</td>
<td>23.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In table (18), results showed that almost one third of respondents (33.3%) were strongly agree and agree (respectively) that debate is the most effective component of dialogic teaching, 23.3% of them were neutral, 6.7% of them disagreed and only 3.3% of the respondents were disagreed with the above assumption.
19/ Argumentation is the most effective component of dialogic teaching

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>22</td>
<td>36.7</td>
</tr>
<tr>
<td>agree</td>
<td>21</td>
<td>35.0</td>
</tr>
<tr>
<td>neutral</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>disagree</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>strongly disagree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of table (19) showed that 36.7% of the respondents strongly agreed that argumentation is the most effective component of dialogic teaching, 35% of them agreed, 15% of them were neutral, 11.7% of them disagreed, whereas only one respondent strongly disagreed.
Figure (19) Argumentation is the most effective component of dialogic teaching

![Bar chart showing argumentation is the most effective component of dialogic teaching](chart.png)

Table (20) Questioning is the most effective component of dialogic teaching

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>22</td>
<td>36.7</td>
</tr>
<tr>
<td>agree</td>
<td>24</td>
<td>40.0</td>
</tr>
<tr>
<td>neutral</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>disagree</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>strongly disagree</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in table (20), the majority of the respondents (76.7%) believed in questioning as the most effective component of dialogic teaching (40% agree, 63.7% strongly agree), 15% of them were neutral, 5% of them strongly disagreed, 3.3% of them disagreed.
Figure (20) Questioning is the most effective component of dialogic teaching

![Figure 20](image)

Table (21) Independent sample t-test

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>df</th>
<th>T value</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogic teaching enhances the learner's skill of speaking</td>
<td>1.4333</td>
<td>.56348</td>
<td>59</td>
<td>5.957</td>
<td></td>
</tr>
<tr>
<td>Dialogic teaching provides learners with a chance to take an active part in classroom discourse</td>
<td>1.5500</td>
<td>.62232</td>
<td>59</td>
<td>6.846</td>
<td>.000</td>
</tr>
<tr>
<td>Dialogic teaching develops the learner's thinking</td>
<td>1.9167</td>
<td>.96184</td>
<td>59</td>
<td>7.382</td>
<td>.000</td>
</tr>
<tr>
<td>Dialogic teaching develops the learner's ability of reasoning</td>
<td>2.1000</td>
<td>.93337</td>
<td>59</td>
<td>9.129</td>
<td>.000</td>
</tr>
<tr>
<td>Through dialogic teaching the learner may develop the skill of dialogue</td>
<td>1.6667</td>
<td>.98577</td>
<td>59</td>
<td>5.238</td>
<td>.000</td>
</tr>
<tr>
<td>Using the technique of dialogue in teaching provides the learners with opportunity to speak to each other</td>
<td>1.6500</td>
<td>.95358</td>
<td>59</td>
<td>5.280</td>
<td>.000</td>
</tr>
<tr>
<td>Using the technique of dialogue in teaching provides the learners with opportunity to listen to each other</td>
<td>2.1000</td>
<td>.95136</td>
<td>59</td>
<td>8.956</td>
<td>.000</td>
</tr>
<tr>
<td>Using the technique of dialogue in teaching provides learners with opportunity to share ideas</td>
<td>1.7833</td>
<td>.92226</td>
<td>59</td>
<td>6.579</td>
<td>.000</td>
</tr>
<tr>
<td>Dialogic teaching develops the learner's debating skills</td>
<td>1.6000</td>
<td>.80675</td>
<td>59</td>
<td>5.761</td>
<td>.000</td>
</tr>
<tr>
<td>Debates in the classroom can serve as an innovative teaching tool</td>
<td>2.2500</td>
<td>.95002</td>
<td>59</td>
<td>10.192</td>
<td>.000</td>
</tr>
<tr>
<td>Debates in the classroom can serve as an innovative learning tool</td>
<td>2.3000</td>
<td>.99660</td>
<td>59</td>
<td>10.104</td>
<td>.000</td>
</tr>
<tr>
<td>Debates improves the learner's verbal skills</td>
<td>1.8167</td>
<td>.94764</td>
<td>59</td>
<td>6.675</td>
<td>.000</td>
</tr>
<tr>
<td>Dialogic teaching enhances the learner's argumentation skills</td>
<td>1.8500</td>
<td>.93564</td>
<td>59</td>
<td>7.037</td>
<td>.000</td>
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<tr>
<td>Argumentation promotes high-level of thinking</td>
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<td>1.07080</td>
<td>59</td>
<td>6.149</td>
<td>.000</td>
</tr>
<tr>
<td>Through dialogic teaching, the learner can develop the skill of questioning</td>
<td>1.8833</td>
<td>.97584</td>
<td>59</td>
<td>7.012</td>
<td>.000</td>
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<tr>
<td>Classroom questioning develops the learner's critical thinking skills</td>
<td>1.8667</td>
<td>.76947</td>
<td>59</td>
<td>8.724</td>
<td>.000</td>
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<tr>
<td>Dialogue is the most effective component of dialogic teaching</td>
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<td>1.06445</td>
<td>59</td>
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<td>1.06511</td>
<td>59</td>
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<td>1.07146</td>
<td>59</td>
<td>7.711</td>
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<td>59</td>
<td>7.324</td>
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</table>

The results of the above table have shown that the mean in all statements was larger than arithmetic mean. This refers to the approval of the research sample towards what has been stated in these statements,
while the standard deviation ranged between 0.7-1.0, this is an indication of the homogeneity of sample answers. The potential value of the phrases was less than 0.05 (moral value), which confirms the existence of significant differences towards the approval (agree).

4.2 The interpretation of the classroom debate results

Using debates in the classroom provide students the opportunity to work in a collaborative and cooperative group setting. By having students discuss and organize their points of view for one side of an argument they are able to discover new information and put knowledge into action. Classroom debates help students learn through friendly competition, examine controversial topics and “strengthen skills in the areas of leadership, interpersonal influence, teambuilding, group problem solving, and oral presentation.

Twenty students had been selected randomly from the sixth semester from the Department of English language – College of Education – Al-Fashir University to perform a classroom debate activity which is a part of this study. These students form the control group which was not introduced to debate techniques and skills. Students with the same number had been chosen from the sixth semester from the Department of English language – College of Arts – Al-Fashir University to represent the experimental group which had been introduced to the techniques and strategies of debate such as debate organization, taking positions, refuting, rebutting and asking questions. The two groups performed a debate on "Which is more devil to our society poverty or illiteracy?" The two groups were assessed by two other English Language lecturers beside the researcher. The participants were evaluated on the following aspects:
1. Presentation

- Tone of voice, use of gestures and level of enthusiasm are convincing to the audience.

- Participants speak loud and clear enough to be heard and understood.

- Viewpoints and responses are outlined both clearly and orderly.

2. Argumentation

- Reasons are given to support viewpoint.

- Arguments made by the other team are responded to and dealt with effectively.

- Arguments are well thought out.

3. Cross fire

- Did the debater provide relevant, focused and brief question?

- Did the debater respond effectively to questions?

- Did the debater demonstrate respect for opponents by cooperating in a polite "give and take" without dominating the discussion?
Evaluation

<table>
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<th>Group</th>
<th>Count</th>
<th>excellent</th>
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<th>good</th>
<th>Fair</th>
<th>poor</th>
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<tbody>
<tr>
<td>experimental</td>
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<td>8</td>
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<td>0</td>
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<tr>
<td>% within group</td>
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<td>10.0%</td>
<td>45.0%</td>
<td>40.0%</td>
<td>5.0%</td>
<td>.0%</td>
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<td>% of Total</td>
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<td>50.0%</td>
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<tr>
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<td>4</td>
<td>9</td>
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<tr>
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</tr>
<tr>
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<td>22.5%</td>
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<tr>
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<td>12</td>
<td>10</td>
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<td>40</td>
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<td>% within group</td>
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<td>27.5%</td>
<td>30.0%</td>
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<td>12.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
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<td>27.5%</td>
<td>30.0%</td>
<td>25.0%</td>
<td>12.5%</td>
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</table>

Chi-square table

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
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</thead>
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<td>Pearson Chi-Square</td>
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<td>Likelihood Ratio</td>
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<td>Linear-by-Linear</td>
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<tr>
<td>Association</td>
<td></td>
<td></td>
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<tr>
<td>N of Valid Cases</td>
<td>40</td>
<td></td>
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</tbody>
</table>

It is clear from the above tables that there is a significant statistical interrelationship between the performance of students and the group (experimental and control), which is represented by this equation (P=0.01).
Table of evaluation (experimental and control group)

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Experimental</th>
<th></th>
<th></th>
<th>Control</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Excellent</td>
<td>v. good</td>
<td>Good</td>
<td>Fair</td>
<td>Poor</td>
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<tr>
<td>f</td>
<td>%</td>
<td>f</td>
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<td>%</td>
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<tr>
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<td>10%</td>
<td>9</td>
<td>45%</td>
<td>8</td>
<td>40%</td>
<td>1</td>
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</table>

Results of the above table have shown that 45% of the respondent students (experimental group) have a very good performance in classroom debate activity, 40% of them were good, 10% of them were excellent, and only 5% of them were fair. On the other hand, the performance of 45% of the respondent students (control group) in the classroom debate activity was fair, 25% of them had poor performance,
20% of them were good, and only 10% of them had very good performance in the classroom debate activity. These results emphasize the necessity of training students in debate techniques in order to develop their thinking and speaking skills. It is clearly observed that students who attended or participated in classroom debate training program gained new skills and techniques that affected their performance positively compared to the students who did not participated in the training program.

4.3 Results out of students' questionnaire and observational checklist

Analyzing students' responses to the questionnaire and the performance of the participants in the classroom debate activity has come out with the following results:

1. Dialogic teaching provides an opportunity for students to be actively engaged.

2. Dialogic teaching enables students to develop the skills of argumentation, questioning and debate which contribute to the development of their thinking and speaking skills.

3. Dialogic teaching uses techniques such as dialogue, questioning, argumentation and debates to allow the teacher and his/her students to address the learning task together.

4. In dialogic teaching, learners are active participants in the teaching – learning processes.

5. Asking questions frequently during class discussion is positively related to good achievement in communication skills.

6. Debate activity includes questioning, argumentation and dialogue between the participating teams which offers it the feature of being the most effective component of dialogic teaching. In addition, debates include the process of considering the evidence in different ways under different conditions which helps to develop learners' thinking skills.
7. Debates as an active instructional strategy enhances learning particularly in the areas of developing thinking skills and oral communication.

8. Argumentation is effective in developing learners' thinking skills if they are introduced to basic vocabulary and technique of claims and refutations.

4.4 Analysis of the interviews

4.4.1 Overview

Interviewing people is a usual way not only to gather expert testimony and important data, but also to learn alternative views. To conduct an effective interview, one must first have a clear sense of purpose: Why is she/he interviewing the person and what information is that person uniquely able to provide? A well conducted interview is a powerful tool for eliciting rich data on people’s views, attitude and the meanings that underpin their lives and behaviors. As Pickard (2007) mentioned “an interview is a descriptive qualitative and an in-depth data collection”

It is crucial that the researcher writes out all questions she/he intends to ask beforehand, making sure that every question is related to the purpose of her/his interview.

4.3.2 Qualitative analysis of the interviews

Forty English language teachers from thirteen universities had been interviewed by asking them three questions. Regarding the first question "do you think that dialogic teaching develops Sudanese university English students' dialogue, debate, argumentation and questioning skills", all respondents agreed with this assumption except one and they thought that using such a method in teaching will help improving these mentioned skills because as stated by twenty-two interviewees that it is the most important factor in developing the four mentioned skills through
promoting communicative skills, and enhancing learner self-confidence. In addition, practicing listening and speaking skills will enable students to correct their errors at the time of speaking, but this requires highly qualified English language instructor.

Other five respondents stated that the importance of this method of teaching (dialogic teaching) came from the fact that it develops effective interaction among the learners. This interaction encourages and motivates learners to discover their abilities in dealing with English language different skills, in addition to enriching student's language through role-taking in communication skills. Four of respondent teachers thought that dialogic teaching enhances argumentative skills that enable students to develop critical thinking and logical reasoning through evidences.

Most of respondent teachers stated that dialogic teaching improves learners’ influence and speech mechanisms through teaching students to take turns and have positive roles. Also it gives students a chance to think critically, develop influence, and empower them to express their views freely and confidently. Only one respondent did not think that dialogic teaching is effective in developing dialogue, debate, argumentation and questioning skills of students because the teacher controls the class through this way, i.e. the teacher becomes the center of the class which restricts the ability of students in dialogue, debate, argumentation and questioning skills. But on the other hand, he believes that these skills can be helpful for students if the teacher gives them enough time for practicing these skills freely and confidently.

When discussing the effectiveness of the above mentioned skills in developing learners' speaking and thinking skills, almost all respondents stated that all the above skills, with more concentration on debate and argumentation skills which provide learners with chances to exchange
and share their ideas with each other, so this will help them to expand their ideas and thoughts which will improve their thinking and speaking skills. One respondent stated that thinking and speaking are complementary skills that depend on wide range of vocabulary which can be gained or acquired through the above mentioned skills. In addition, some respondents thought that the effectiveness of dialogic teaching skills came from the fact that it helps learners to find a session that aids them to activate their cognitive abilities and oral abilities (thinking and speaking abilities).

One of the interviewees believes that only dialogue and questioning skills suit student's knowledge and experience at this stage. Students at this level are unable to use debate and argumentation skills in class. Another interviewee said that dialogue is the most effective skill because all students can participate through using dialogue. He also stated that questioning technique is important in refreshing learner's ideas and thoughts.

Most of the interviewed teachers stated that there are many challenges facing dialogic teaching in Sudanese universities such as the lack of enough time, motivation, students’ language proficiency levels and the influence needed to develop these skills. The major challenge is how to offer adequate training for teachers on modern techniques of dialogic teaching.

Depending on the qualitative analysis of the responses provided by the interviewees, the researcher found that most of the respondents agreed to the following:

1. Dialogic teaching develops learners’ thinking and speaking skills if it is applied on its scientific basis.
2. Dialogic teaching provides learners the opportunity to practice effectively speaking skills.
3. Some interviewees thought that dialogue skills and questioning skills are the most effective and applicable in the classroom than the other components of dialogic teaching.

4. Dialogic teaching components are effective if students are given enough time to practice these skills.

5. These skills can be effective if they are practiced in authentic communicative situations.

6. The effectiveness of dialogic teaching depends on the teacher who is supposed to be of high proficiency and aware of these techniques.

7. Dialogic teaching suites students in universities.

8. Dialogic teaching is faced by a number of challenges such as the time available to both students and teachers, motivation to speak the language, proficiency level and fluency needed to develop such skills.
Chapter Five
Conclusion, Summary & Recommendations
Chapter Five

5. Conclusions and Summary

Dialogic teaching encourages learners into engage and thinking by drawing them into dialogue. Anything can be taught in a way that frees learners to think at the same time as they learn.

5.1 Summary

To collect data for the study, three tools had been used; a questionnaire, an interview and an observational checklist. The questionnaire was distributed to the students of second, third and fourth year who had been selected from different Sudanese universities. Observational check list was used for two groups of respondents: Group (A) control group: consisted of 20 students at 3rd year. Group (B) Experimental Group: Also consisted of 20 students at 3rd year (semester 6). The forty students were from Al-Fashir University. Interviews were used with 40 English Language lecturers, assistant professors, and professors from different Sudanese Universities.

The collected data had been analysed quantitatively and qualitatively. Data analysis has shown that dialogic teaching enables students to develop the skills of argumentation, questioning and debate which contribute to the development of their thinking and speaking skills. It has been found that dialogic teaching components are effective if students are given enough time to practice these skills. Moreover, these skills can be effective if they are practiced authentic communicative situations.
5.2 Conclusions

The components of dialogic teaching skills which had been tested throughout the research, explained that they are effective and interactive in learners' speaking and thinking. The most essential results are explored by some interviewees who stated that dialogue skills and questioning skills are the most effective and applicable in the classroom than the other components of dialogic teaching. Moreover, debate includes questioning, argumentation and dialogue between the participating teams which proved that it is effective and inclusive component. Among some of the experts who were interviewed stated that argumentation is effective in developing learners' thinking skills if they are introduced to basic vocabulary and technique of claims and refutations.

Dialogic teaching is faced by a number of challenges such as the time available to both students and teachers, motivation to speak the language, proficiency level and fluency needed to develop such skills. In order to make dialogic teaching the interactive method to develop learners' speaking and thinking, the raised challenges should be addressed by all the concerns.

5.3 Recommendations:

1. Curriculum designers have to consider materials that provide the learners to practice language effectively.
2. Two or more participants are encouraged use shared language interactively.
3. Teachers are required to help students to contribute thoughtfully to classroom talk.
4. Teachers are required to adopt dialogic teaching method to make the classrooms creatively.
5. Teachers have to increase the learners' awareness of the dialogic aspect.
6. Teachers are required to provide learners with questions which encourage them to think.
5.4 Further suggestions:

1. Each of components of the dialogic teaching method requires to be investigated inclusively and separately.

2. The culture is required to be studied as a moderator variable in the components of dialogic teaching.

3. The relation between the culture and thinking are required to be investigated.
References


40. www.robinalexander.org.uk./docs/wolfelexander.pdf

41. www.tandfonline.com/loi/tsed20
Appendices

Tables

1.1 Analysis and discussion of students' questionnaire
1/ Dialogic teaching enhances the learners' skills of speaking.
2/ Dialogic teaching provides learners with a chance to take an active part in classroom discourse.
1.3/ Dialogic teaching develops the learner's thinking.
1.4/ Dialogic teaching develops the learners' ability of reasoning.
1.5/ Through dialogic teaching the learner may develop the skill of dialogue.
1.6/ Using the technique of dialogue in teaching provides the learners with opportunity to speak to each other.
1.7/ Using the technique of dialogue in teaching provides the learners with opportunity to listen to each other.
1.8/ Using the technique of dialogue in teaching provides learners with opportunity to share ideas.
1.9/ Dialogic teaching develops the learners' debating skills.
1.10/ Debates in the classroom can serve as an innovative teaching tool.
1.11/ Debates in the classroom can serve as an innovative learning tool.
1.12/ Debates improve the learner's verbal skills.
1.13/ Dialogic teaching enhances the learner's argumentation skills.
1.14/ Argumentation promotes high-level of thinking.
1.15/ Through dialogic teaching, the learner can develop the skill of questioning
1.16/ Classroom questioning develops the learner's critical thinking skills.
1.17/ Dialogue is the most effective component of dialogic teaching.
1.18/ Debate is the most effective component of dialogic teaching.
1.19/ Argumentation is the most effective component of dialogic teaching.
1.20/ Questioning is the most effective component of dialogic teaching.

2.1 The interpretation of the classroom debate results
2.1.2 Chi-square table
2.1.3 Table of evaluation (experimental and control group)