

# **DEVELOPING CREATIVE THINKING: A COGNITIVE APPROACH TO THE TEACHING OF ENGLISH LITERATURE**

By

Munazza Yaqoob



NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

December 2007

© Munazza Yaqoob

# **DEVELOPING CREATIVE THINKING: A COGNITIVE APPROACH TO THE TEACHING OF ENGLISH LITERATURE**

By

Munazza Yaqoob

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF

**DOCTOR OF PHILOSOPHY**

In **English**

To

FACULTY OF ADVANCED INTEGRATED STUDIES AND RESEARCH  
(P.h.D English)



NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

December 2007

© Munazza Yaqoob 2007



Faculty of Advanced Integrated Studies and Research  
National University of Modern Languages, Islamabad

## THESIS AND DEFENSE APPROVAL FORM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Advanced Integrated Studies & Research for acceptance:

Thesis/ Dissertation Title: **DEVELOPING CREATIVE THINKING: A COGNITIVE APPROACH TO THE TEACHING OF ENGLISH LITERATURE**

Submitted By: Munazza Yaqoob  
Name of Student

Registration #: -026-PhD/Eng/2001

Doctor of Philosophy  
Name of Degree in Full

English  
Name of Discipline

Prof. Dr Saeeda Asadullah Khan  
Name of Research Supervisor

\_\_\_\_\_  
Signature of Research Supervisor

Dr Shazra Munnawer  
Name of Dean (FAISR)

\_\_\_\_\_  
Signature of Dean (FAISR)

Brig ® Dr Aziz Ahmed Khan  
Name of Rector

\_\_\_\_\_  
Signature of Rector

\_\_\_\_\_  
Date

## CANDIDATE DECLARATION FORM

I, Munazza Yaqoob

Daughter of Muhammad Yaqoob

Registration No. 026-PhD/Eng/2001

Discipline English

Candidate of Ph.D at the National University of Modern Languages do hereby declare that the thesis DEVELOPING CREATIVE THINKING: A COGNITIVE APPROACH TO THE TEACHING OF ENGLISH LITERATURE submitted by me in partial fulfillment of PhD degree in English Literature is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my dissertation at any stage, even after the award of a degree, the work may be cancelled and the degree revoked.

15 December 2007

Date

---

Signature

Munazza Yaqoob  
Name

## **ABSTRACT**

### **Developing Creative Thinking: A Cognitive Approach to the Teaching of English Literature**

The study was conducted to investigate whether the application of cognitive teaching tools, strategies, and techniques through cognitive teaching model help develop creative thinking and other higher-order thinking skills of the students of literature at Master's level.

The study comprised two phases: phase I was survey, while phase II was experimental. In phase I (survey) three questionnaires were prepared: one for the students, second for the teachers, and third for the chairpersons of English departments. The questionnaires were used to collect data about the existing literature teaching methods in Pakistani universities and colleges. The data collected were tabulated and analyzed on mean score and calculated to find out the central tendency of responses.

In phase II of study (experimental), experiment was carried out for two months. The sample was 138 students of M.A. English at International Islamic University, Islamabad studying Romantic Poetry and Fiction II (Modern Fiction). 68 students of Romantic poetry were randomly divided into two groups: 34 in controlled group and 34 in experimental group. Similarly 68 students of Fiction II were randomly divided into two groups: 34 in controlled group and 34 in experimental group. Relevant pre-tests were conducted on all the four groups before the start of the experiment and post-tests at the end of the treatment period that was two months. The data collected through achievement tests were scored and analyzed by applying z test. Phase I of the study concluded that the existing literature teaching methods are traditional and do not develop students' creative thinking and other higher-order thinking skills. Phase II concluded that the application of cognitive teaching strategies and techniques through cognitive teaching model could help develop creative thinking and other higher-order thinking skills of the students of literature.

## TABLE OF CONTENTS

Chapter		Page
	DISSERTATION AND DEFENSE APPROVAL FORM	ii
	CANDIDATE DECLARATION FORM-----	iii
	ABSTRACT -----	iv
	TABLE OF CONTENTS-----	v
	LIST OF TABLES -----	vii
	LIST OF FIGURES-----	xi
	DEDICATION-----	xii
	ACKNOWLEDGEMENTS-----	xiii
I	INTRODUCTION -----	1
1.1	Significance of Literature -----	3
1.2	Existing Teaching Methods of Literature in Pakistan -----	5
1.3	Statement of the Problem -----	11
1.4	Objectives of the Study-----	11
1.5	Hypothesis-----	12
1.6	Research Questions -----	12
1.7	Significance of the Study-----	12
1.8	Delimitation of the Study -----	13
1.9	Structure of the Study -----	15
II	REVIEW OF RELATED LITERATURE -----	16
2.1	Human Learning, Cognition and Cognitive Processes -----	16
	Perception -----	21
	Memory -----	22
	Retrieval -----	25
2.2	Thinking and Thinking Skills -----	26
2.3	Thinking and Problem Solving -----	27
2.4	Creative Thinking -----	30
	Process of Creative Thinking -----	34
	Nurturing Creative Thinking -----	35
	Problem Solving and Creative Thinking -----	49
	Brain Storming and Creative Thinking -----	51
2.5	21 <sup>st</sup> Century Education and Cognitive Teaching -----	54

2.6	Teaching of Literature -----	59
2.7	Review of the Related Studies -----	67
III	METHODS AND PROCEDURES OF THE STUDY ----	75
3.1	Design -----	75
3.2	Population-----	76
3.3	Sample -----	77
3.4	Tools -----	78
3.5	Administration -----	82
3.6	Data Analysis -----	85
IV	PRESENTATION AND ANALYSIS OF DATA-----	87
4.1	Presentation and Analysis of Phase I Data -----	87
	Data Analysis of Questionnaire for Chairpersons-----	88
	Data Analysis of Questionnaire for Teachers-----	96
	Data Analysis of Questionnaire for Students-----	109
4.2	Presentation and Analysis of Phase II Data -----	122
V	ANALYSIS AND INTERPRETATION OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS-----	129
5.1	Summary of the Research Outcomes -----	129
5.2	Phase I: Analysis and Interpretation of Findings-----	131
5.3	Phase II Analysis and Interpretation of Findings-----	138
	Cognitive Teaching Model-----	141
	Cognitive Teaching Model and Lesson Plans-----	145
	Worksheets-----	147
	Analysis of the Effectiveness of the Cognitive Teaching Model-----	156
5.4	Conclusion -----	160
5.5	Suggestions for Future Research -----	162
5.6	Recommendations -----	166
	WORKS CITED -----	168
	APPENDICES-----	
	Appendix A	
	Appendix B	
	Appendix C	
	Appendix D	
	Appendix E	
	Appendix F	
	Appendix G	

Appendix H

**LISTOF TABLES**

1.	Opinion about delivery of comprehensive lectures-----	88
2.	Opinion about introducing interpretations of critics-----	88
3.	Opinion about imparting all relevant information in the class -----	89
4.	Opinion about the completion of all prescribed syllabus	89
5.	Opinion about taking down notes of lectures by students	90
6.	Opinion about relating teaching of literature with the practical world -----	90
7.	Opinion about encouraging students to do assignments on topics not related to exams -----	91
8.	Opinion about using visuals to assist teaching -----	91
9.	Opinion about teaching students skills to organize material and information -----	92
10.	Opinion about arranging discussions, brain storming sessions, and seminars -----	92
11.	Opinion about encouraging collaboration and cooperation among students-----	93
12.	Opinion about encouraging students to engage in innovative activities such as dramatizing poems and short stories -----	93
13.	Opinion about encouraging students to generate personal responses to the texts -----	94
14.	Opinion about emphasizing form and contents of the text-----	94
15.	Opinion about proving guidance to students to locate and process information -----	95
16.	Opinion about encouraging electronic communication among students and teachers -----	95
17.	Opinion about teaching of literature as a source of aesthetic pleasure -----	96
18.	Opinion about teaching of literature as a source of moral instruction -----	96
19.	Opinion about teaching literature as a tool to acquire skills to solve problems -----	97
20.	Opinion about facilitating students to focus on the use of language in the text -----	97
21.	Opinion about students' reliance on interpretations of well known critics -----	98
22.	Opinion about generating unusual and novel interpretations of texts -----	98
23.	Opinion about completing all prescribed syllabus -----	99
24.	Opinion about students' dependence on key books and	99

	notes -----	
25.	Opinion about relating teaching of literature with the practical world -----	100
26.	Opinion about teaching techniques to organize information -----	100
27.	Opinion about assigning assignments on topics not related to exams -----	101
28.	Opinion about encouraging students to work on projects and presentations -----	101
29.	Opinion about relating literary texts to students' personal life and experiences -----	102
30.	Opinion about relating literature with other disciplines--	102
31.	Opinion about presenting issues in literary texts as problems for students to solve -----	103
32.	Opinion about facilitating students work in groups and pairs -----	103
33.	Opinion about conducting discussions and brain storming sessions in the class -----	104
34.	Opinion about encouraging students to be flexible in their interpretations of texts-----	104
35.	Opinion about asking intellectually stimulating questions-----	105
36.	Opinion about comparative analysis of texts in terms of similarities and difference-----	105
37.	Opinion about encouraging students to predict theme of text -----	106
38.	Opinion about content centred approach to the teaching of texts -----	106
39.	Opinion about teaching approach emphasizing the content and form of a text -----	107
40.	Opinion about using visual aids -----	107
41.	Opinion about encouraging the use of internet to find information -----	108
42.	Opinion about students' reliance on the interpretations of critics -----	109
43.	Opinion about encouraging students to disagree with the interpretations of critics -----	109
44.	Opinion about encouraging students to generate novel and unusual interpretations-----	110
45.	Opinion about students' understanding of materials and concepts -----	110
46.	Opinion about encouraging students to think -----	111
47.	Opinion about providing guidance to locate and process relevant sources of information -----	111
48.	Opinion about encouraging the use of internet-----	112

49.	Opinion about relating literature with the practical world in current teaching methodology-----	112
50.	Opinion about teaching techniques to organize material and information -----	113
51.	Opinion about assigning project works and research assignments to students-----	113
52.	Opinion about organizing class room seminars and students' presentations-----	114
53.	Opinion about the use of visual aids by teachers in the classroom -----	114
54.	Opinion about relating literature with students' personal life and experiences -----	115
55.	Opinion about relating literature with other disciplines	115
56.	Opinion about applying acquired knowledge and understanding to new situations -----	116
57.	Opinion about encouraging cooperation and collaboration among students -----	116
58.	Opinion about conducting discussions and brain storming sessions in the class -----	117
59.	Opinion about using prior knowledge by students to interpret texts -----	117
60.	Opinion about encouraging students to use visuals to organize information -----	118
61.	Opinion about assigning novel tasks to promote creativity -----	118
62.	Opinion about involving students in creative activities	119
63.	Opinion about motivating students to predict meaning of texts-----	119
64.	Opinion about encouraging students to write journals and response essays -----	120
65.	Opinion about encouraging students to conduct interviews and surveys -----	120
66.	Opinion about having comprehensive lectures on texts	121
67.	Comparison of performance of control group on pre-test and post-test for Romantic Poetry -----	122
68.	Comparison of performance of experimental group on pre-test and post-test for Romantic Poetry -----	123
69.	Comparison of performance of experimental and control group on pre-test for Romantic Poetry -----	123
70.	Comparison of performance of experimental group and control group on post-test for Romanic Poetry -----	124
71.	Comparison of performance of control group on pre-test and post-test for Fiction-II -----	124
72.	Comparison of performance of experimental group on pre-test and post-test for Fiction-II -----	125

73.	Comparison of performance of experimental and control group on pre-test for Fiction-II -----	125
74.	Comparison of performance of experimental and control group on post-test for Fiction-II -----	126
75.	Comparison of performance of control group on pre-test and post-test for Romantic Poetry and Fiction-II -----	126
76.	Comparison of performance of experimental group on pre-test and post-test for Romantic Poetry and Fiction-II	127
77.	Comparison of performance of experimental and control group on pre-test for Romantic Poetry and Fiction-II -----	127
78.	Comparison of performance of experimental and control group on post-test for Romantic Poetry and Fiction-II -----	128
79.	Table explaining the cognitive teaching model -----	143

## LIST OF FIGURES

1.	Lotus Blossom Technique-----	42
2.	Bloom's Ranking of Thinking Skills and Taxonomy of Questions-----	50
3.	Cognitive Teaching Model to Develop Creative Thinking -----	142

# **DEDICATION**

To all whose unconditioned love has harmonized the music of the beatings of my heart, composed my thoughts, and supported me to hold the wings of my dreams.....

## **ACKNOWLEDGEMENTS**

I wish to express my heartfelt thanks to my supervisor Prof. Dr. Saeeda Asadullah Khan who was always helpful and contributed greatly to the preparation of my project. Her suggestions, advices, and comments were most valuable. My sincere appreciation is to Dr. Mohammad Javed, for his assistance in the preparation of this manuscript.

List of friends and colleagues who supported me through this work and who I wish to acknowledge, runs long. I will thank many in writing and many more in person. First, I would like to thank Farhat and Amina, my best friends. They have played several roles in this process, including critic, colleague, travel mate, advisor, research assistant and loving friends. The debt to them can hardly be expressed in words. Farhat has always been there for me with encouragement, prayers, a tender smile and tons of patience. I could not have done it without her unfailing support.

I wish to express my heartfelt thanks to my family, in particular my mother for her prayers and reassurance, and constant encouragement. My thanks are due to my very dear Bubloo (Hatim) for providing me my favourite pastime with his loving company and stories in times of anxiety and depression. Miss. Amal Sayyid, my young colleague, has my deepest gratitude for assisting me at various stages of this research, despite many other matters claiming her attention. I do appreciate her wonderful generosity, understanding, and keen insight. My colleagues in the department of English: Quratulain, Seema, Tabasum, Rabia, Sofia, Shamim, and

Aroosa, the best team I could ever have, I love and thank you dearly. My colleagues helped me during the research process and made sure I had everything I needed to complete my project. I also thank the chairpersons of the departments of English, teachers, and students who participated in the study and facilitated me to collect data for the study. My sincere appreciation goes to the marvelous students who participated in the experiment. Their questions, comments, and evaluations helped me understand what was working in the classroom and what was not.

My thanks are also due to Dr. Mahmood Ahmad Ghazi, and Dr. Riaz Hasan for their motivation. I am particularly thankful to Dr.Zafar Ishaq Ansari whose intellectual enthusiasm and sincerity helped me grow as a scholar and academician.

M.Y.  
2007

# CHAPTER 1

## INTRODUCTION

Twenty first century is regarded as the age of globalization, telecommunication and digital technology. The rapidly changing present world demands people to be multi-tasked, equipped with the skills of collaboration and flexibility, and have the ability to process information. Problem solving, goal setting, and creative thinking are considered specific skills required for the twenty first century workforce. For Jeffrey and Woods (2003, p.122) education needs to foster creativity that is to encourage flexibility, innovation and, “positive identities.” Similarly Albrecht (2002) regards training of human brain for better creative products as the need of the time. The situation justifies the need for education to be reconstructed, theory to be redesigned, and strategies to be reconsidered. In this regard Feden and Vogel (2003, p.16) are of the opinion that “we have a new set of lenses through which we can view teaching and learning. They are provided by cognitive psychology.” Thus teachers need to update their knowledge of cognitive psychology and receive necessary training in cognitive teaching methods. They need to re-orient their teacher- centered classrooms to student- centered and give students their legitimate autonomy. Students need to be engaged in practical projects, active manipulation of material, processing information, asking questions, making queries, solving open-ended problems, and generating their responses rather than giving right answers.

In Pakistani universities and colleges, it is observed that majority of the teachers are committed to traditional methods of teaching literature. The traditional methods of teaching require teachers of literature to impart a vast amount of information to students who are expected to accumulate the imparted information and reproduce accurately in examination. There is hardly any research and effort to apply cognitive teaching strategies and techniques to teach literature in order to develop students' thinking and other cognitive processes such as perception, memory, retrieval and transference. As a result, though students successfully get a degree at the end of the courses, they remain unable to process and manipulate information, synthesize and evaluate ideas, make connection between classroom learning and the practical world outside, or generate personal and innovative ideas. This teaching-learning situation of literature for some academicians like Miller (2002) has brought decline of literary studies as he explains:

One of the strongest symptoms of the imminent death of literature is the way younger faculty members, in departments of literature all over the world, are turning in droves from literary studies to theory, cultural studies, postcolonial studies, media studies (film, television, etc.), popular cultural studies, Women studies, African-American studies, and so on....This is so even though many of them were trained in old-fashioned literary history and the close reading of canonical texts (p.10).

Gilman (2000, p.xi) also supports this observation by referring to the decline of the programmes of the universities, which are offered in English studies and other modern languages.

There is however a great deal of literary scholarship which regards this trend of interdisciplinarity in literary studies as a healthy and positive development. Literary theorists are devoting their efforts to build up useful links between literature and psychology, literature and political economy and literature and cultural studies. Modern and postmodern approaches to the interpretations of literary texts such as psychoanalysis, cognitive poetics, Marxist literary theory, postcolonial literary theory and feminist literary theory are all examples in this regard. (Rivkin and Ryan, 2002; Eagleton, 1996)

### ***1.1 Significance of Literature***

Literature is considered as verbal works of arts and compositions with the primary function of being read. Literature serves to provide an exquisite excitement of emotions and a very deep insight into the nature of reality. It translates various experiences of life into various patterns and thus helps readers discover meaning in their lives. It provides them with insight to deal with the people and world around them.

The literary world is regarded as a mingling of fact and fiction (Bennet and Royle, 1995, p.191). The factual elements tend to remain subordinate to fictional elements. Literature creates a new world in addition to the already existing one and thus, is distinguished from other writings. It gives emotional as well as intellectual

pleasure. Commenting on aesthetic value of literature Diyanni (2002, pp.2-7) also thinks that literature though transports us to the world, created by imagination, yet evokes our emotions of love, sorrow, joy, and pity, and thus enhances our appreciation and understanding of life.

Literature is not a religious, moral and political document, but it is concerned with morals, religion and politics. For Hopkins (2001, p.56) “literary study is not value free- but on the contrary presents a certain ‘national picture’, a ‘class picture’, certain views of history, and specific gender identities.” Supporting this view Bertens (2001, pp. 81-116) also regards literary study as a study of ideologies and issues. Marxian, feminist, post colonial, and new historical approaches to the study of literature testify this statement.

Literature is an act of creation born out of delight and exaltation. The literary artists while in the process of creation are in a state of exaltation which provides moral and intellectual elevation and consequently enables them to hand over to the readers a genuine piece of art. In Barnett’s (1996, p.78) opinion, “poets, dramatists, and story tellers find or impose a shape on scenes...giving readers things to value.” The readers experience moral and intellectual transcendence in the process of reading a genuine piece of literature. In literature the world is shaped out in a way that a misbalance in values is most noteworthy. The forces of virtue and truth are presented as in conflict with forces of vice and falsehood, and humanity is shown as suffering at the hands of social, political and moral injustices. Such presentation of life engages our moral sympathies and brings into test our moral allegiances. For this very reason as Showalter (2004, p.22) observes teaching of literature, for the

educationists in the past as well as present, is considered “a way of making people better human beings.” Literature enables us to recognize the best part of ourselves and motivates us to contribute positively in life.

Literature gives pleasure, elevates and transforms experience, and functions as a continuing criticism of values. The aesthetic delight of literature serves to purify emotions and morals, and illumine the intellect. In other words literature gives knowledge and understanding. Thus, it is considered an important part of education.

## ***1.2 Existing Teaching Methods of Literature in Pakistan***

The approaches to teaching literature in academic settings for Carter and Long (1991, p.2), are categorized as, “the cultural model”, “the language model”, and “the personal growth model.” Lindblom (2003) explaining these approaches, says:

English teachers frequently teach literature to *transcend* human experience, to encourage the rising above of material circumstances; this amount to a convenient way for us to shut out the world from our classrooms and our minds. Making matter worse, standardized exams with out-of-context reading-skills questions and literary trivia encourage this reductive view of literature, limiting the potential that English courses have for helping students to engage effectively in public discourse (p.97).

In Pakistani universities and colleges, literature is taught mainly as a cultural model or as a combination of cultural and language model. Teaching methodology attempts to facilitate students to read about literature rather than to learn to read

literature. Students are required to focus on the ways language is used in a text and make stylistic analysis. They are also required to understand and collect information about culture and ideologies invested in texts by their authors. Hence, the essence of literature, which can best work to provide personal growth and help build up students' evaluative and creative abilities, is undervalued and neglected. The teaching of literature has almost failed to develop a total response to literary works, a response in which thought and feeling are inseparably related.

Teaching of literature at graduate and postgraduate level in Pakistan is based on the historical-biographical and moral- philosophical approach. The historical-biographical approach to teaching literature considers a literary work mainly a mirror of its author's life and age (Guerin, Labor, Morgan, Reesman and Willingham, 2005, p.51). This approach to the teaching of literature makes literature a source of transmitting biographical, historical, and socio-political information. Similarly moral and philosophical approaches take aesthetic value of literature as secondary and interpret literature in the context of contemporary moral and philosophical thought. All these approaches, it is observed, fail to enable students to relate literature to their life, generate their own meanings, and evaluate the given information.

The language-based approach to teaching literature is focused on the way language is used in a text. It is not basically concerned with the aesthetic, moral or philosophical merits of literature. This approach attempts to develop students' linguistic knowledge and competence and helps them have direct contact with a text. This approach is helpful in developing critical response to texts. In Pakistani universities and colleges this approach is combined with biographical, historical,

moral, and philosophical approaches. As a result students' attention is not primarily focused on linguistic analysis and they remain unable to read and interpret texts critically and independently.

The teachers in literature classroom mainly attempt to facilitate students to acquire a store of information related to the target text and ignore to manipulate the exiting possibilities, which the magnificent content of literary texts provide (Chandran, 2006, p.151). The students are taught various critical concepts and literary conventions. The activation of students' cognition and their thinking abilities is considered irrelevant in this approach to teaching literature. Students are trained to have over-independence on background information and rely on some well-known interpretations by some well-known critics. Students are not encouraged to think and generate meanings and interpretations or transfer knowledge to their practical life.

The teaching of literature in Pakistan is teacher centered rather than learner centered. Consequently the study of literature is no more regarded as rewarding in the scheme of education. Literature is viewed as a species of knowledge or learning. Students get sufficient knowledge of the literary genres such as poetry, novel, short story etc., improve English language competence, become aware of the text's socio-cultural context, and some philosophic interpretations, but fail to use information and acquire the ability and necessary skills to analyze and appreciate literature independently. They become a storehouse of the information related to certain texts but not creative thinkers. They do not achieve competence in analytical, critical and generative thinking. Students with this teaching learning approach, if they have a good memory, perform well in examinations, but fail to process information and use

classroom learning to solve world issues outside the classroom. As literature remains for them a subject to be passed at the end of the course, they fail to find a genuine involvement in a piece of literary art, which consequently results in failure to achieve desired emotional, intellectual and aesthetic growth.

Lecture method is considered the most useful and as Edward, Smith and Webb (2001, p.1) think “common form of teaching” in Pakistani colleges and universities. The teacher imparts information about literature in general or about a specific text and students passively listen to the teacher, take notes of the lecture, collect necessary references and prepare to pass their examination at the end of the course. Discussions, colloquiums, seminars or tutorials are hardly arranged to activate students’ evaluative and creative thinking abilities.

In Pakistani universities and colleges literature is an examined subject. Resultantly all efforts of teachers and students are directed to achieving success in the examination. This system develops an approach to the teaching of literary criticism, which is stereotyped, formulaic, and sterile. Teachers in this system mostly provide students with short cut techniques and discuss a text with reference to some general examination topics. Students too in this system rely on teacher’s notes or lectures and copy relevant answers from cheaply available key books. They memorize all relevant answers and lecture notes and in the end reproduce them in the examination.

Studying literature thus, has become a dull and cumbersome experience for students in academic institutions. The study of literature is now known as studying obsolete and fictitious texts, which have no relevance to the practical world of the

twenty first century. Students pursue literature courses to achieve competence in English language or simply to get a degree and be able to secure some job for them. Students are not motivated to study literature in order to develop their evaluative skills and generate their creative opinions and interpretations. Literature classroom does not help them develop a spirit of collaboration, flexible attitude and ability to transfer the learnt information to the life around. Students remain unable to acquire the ability to judge that literary truth presented in form of allegory, fairy tales, or myths is not documentary but symbolic and is applicable to their life. Literature as an academic subject has become of secondary importance. The modern commercial age has given rise to a reassertion of the utility principle and literature is regarded as irrelevant to the urgent political, social and economic issues.

The present crisis in teaching and studying literature demands an approach and methodology to teach literature, which can revive the importance of the study of literature and make it a tool to help students develop the skills necessary to cope with the ever-changing modern technical world. Literature as an academic subject is in need of a teaching methodology, which enables students not only to accumulate information about the authors, history, and literary conventions, but also to have the ability to think creatively and generate opinions and novel ideas, and apply the classroom study to practical life. There is a need to develop critical and creative thinking skills of students so that they can process information and discover multiple solutions to the problems and complications of life. Saaty (2001) supporting this view states:

Knowledge is already known, and to teach it to people is just getting that knowledge repeated in many memories and does not add to our human potential. What we want for sure is to use knowledge in ways that make people creative because creativity adds to our potential. Knowledge is a means, creativity is an end because it keeps mind busy with new challenges to solve problems and expand the dimensions of consciousness (p.6).

Modern research in educational psychology has proved that it is possible to improve human cognition that is capacity to think creatively about challenges and opportunities, ability to generate creative solutions and transform solutions into action, and skills to process, synthesize, and evaluate information. It is realized as Geersten (2003, p.17) says that the infusion of higher-order thinking skills has potential to redesign higher education and change the meaning of “higher education from extended years of formal learning to lifelong habit of high level thinking.” Hence, today in the modern part of the world teaching of thinking skills is considered a primary objective in the educational institutions. Thinking skills programmes are organized and regularized in educational institutions and curriculums in most of the developed countries of the world. Feuerstein’s Instrumental Enrichment (IE), The Somerest Thinking Skills Course, Martin Lipman’s Philosophy for Children, Cognitive Acceleration through Science Education (CASE), Thinking through Geography, and Activating Children’s Thinking Skills (ACTS) are some of the examples in this regard (McGuinness, 1999). Thinking skills programmes are conducted either as separate programmes designed for teaching of thinking or as

infused programmes designed to teach for thinking. In infused programmes thinking is integrated with the existing curriculum.

The present research explores the strategies and techniques used in the thinking skills programmes and attempts to apply them to the teaching of literature. Thus it attempts to prove that fusion of the thinking skills with the teaching of literature can help develop students' cognitive abilities and improve their critical and creative thinking.

### ***1.3 Statement of the Problem***

The purpose of the study was to explore whether the application of creative thinking tools and techniques through cognitive teaching model in literature classroom would nurture students' creative thinking or creative problem solving abilities and other higher-order thinking skills and thus, enable them to have necessary skills to manage the problems and issues of the twenty first century, which is regarded as the age of globalization, telecommunication, and information.

### ***1.4 Objectives of the Study***

The objectives of the research were:

1. To discuss various aspects of creative thinking
2. To establish relationship between creative thinking and literature
3. To investigate the present status of teaching literature in the context of creative thinking

4. To develop cognitive teaching model for teaching literature in order to nurture students' creative thinking and other higher- order thinking skills

### ***1.5 Hypothesis***

The hypothesis of the research was:

There is a significant difference between the performance of students who are taught through cognitive teaching model and those who are taught through standard lecture method.

### ***1.6 Research Questions***

The questions that guided this study were:

1. What are present literature teaching methods in Pakistani universities and colleges? Are they based on cognitive psychology?
2. What cognitive processes are involved in creative thinking and what are the functions of creative thinking?
3. Can teaching of literature help develop students' creative thinking and other higher-order thinking skills?
4. What are the specific tools, strategies, and techniques, which can be used to develop creative thinking and other higher-order thinking skills?

### ***1.7 Significance of the Study***

The current research was carried out with the assumptions that creative thinking and other related higher-order-thinking skills could be nurtured in the students of

literature and cognitive teaching strategies and techniques could be infused in literature lessons to foster students' creative thinking.

Therefore, the current research may help students to develop their cognitive processes and be able to process information provided to them instead of following the established opinions and assumptions. It can help the students of literature become critical and creative thinkers and problem solvers, and have the necessary cognitive abilities to successfully transfer the knowledge and information they learn in the classroom successfully to solve the problems they encounter in their real life. The study can inspire the teachers of literature to make their classrooms as a place of active learning where students work in collaboration as well as have independent opinions. It can help bring a positive change in the existing teaching methods of literature, literature syllabuses, and general educational planning and practice. The current research is interdisciplinary as it attempts to establish link between cognitive science and literary studies so it may add positively to contemporary efforts of literary scholarship directed towards interdisciplinarity. In addition, it can also add to the significance of studying literature in the twenty-first century - the age of information, digital technology and globalization, and as a result it may contribute to human resource development of the country.

### ***1.8 Delimitation of the Study***

First phase of the present research i.e. survey, was delimited to the students of master's of English, teachers who were engaged to teach English literature courses at master's level, and chairpersons of the departments of English. The survey was

conducted in Punjab and Islamabad in the year 2006. Following institutions participated in the survey:

- National University of Modern languages, Islamabad
- International Islamic University, Islamabad
- Islamabad College for Girls F-7/2, Islamabad
- Islamabad college for Girls F-6/1, Islamabad
- Islamabad College for Girls, Margalla Road, Islamabad
- Gordon College, Rawalpindi
- Government Asghar Mall College, Rawalpindi
- Federal Government College for Women, Kashmir Road, Rawalpindi
- Government College Waqar-un-Nisa, Rawalpindi
- Fatima Jinnah Women University, Rawalpindi
- Islamia University, Bahawalpur
- S.E College, Bahawalpur
- Government College for Girls, Multan
- Government College for Boys, Multan
- Bahauddin Zakaria University, Multan
- Government College University, Lahore
- Women University, Lahore
- Government College for Women, Wahdat Colony, Lahore
- Government College for Boys, Railway Road, Lahore
- Government Islamia College, Lahore

- Government M.O. College, Lahore

Second phase of the research i.e. experiment was delimited to the students of Master's of English, studying Romantic Poetry and Fiction II (Modern Fiction) in the year 2006. The text used for the experiment on Romantic Poetry students was *The Prelude* Book I by William Wordsworth, and for Fiction II students it was *Heart of Darkness* by Joseph Conrad.

### ***1.9 Structure of the Study***

The present study is divided into two phases: Phase I i.e. survey and phase II i.e. experiment. In phase I survey was conducted to gather data of the present literature teaching methods in Pakistani universities and colleges.

Experiment for the second phase of the study was carried out for two months on the students who were studying the courses of Romantic Poetry and Fiction II because these two courses are taught in all literature programmes at Master's level in Pakistan.

Data collected through survey was tabulated and analyzed by using mean score formula, and data collected through experiment was analyzed with  $z$  test.

## **CHAPTER 2**

### **REVIEW OF RELATED LITERATURE**

This chapter presents a review of literature related to the conceptual framework of the present study. The current research is interdisciplinary in nature as it attempts to combine cognitive learning psychology with literature. In order to meet the objectives outlined in the Introduction the researcher needed to encompass and link the following areas: human learning, cognitive psychology, creative thinking and other thinking skills, twentieth-first century education and approaches to teaching and interpretation of literature. An extensive literature review was thus needed in order to prepare a sound theoretical and conceptual framework to design a cognitive teaching model for teaching literature in the twenty-first century. This chapter is organized as follows: Firstly it presents the foundational theoretical framework and defines, explains and discusses literature on human learning, cognition and cognitive processes, thinking and thinking skills, and creative thinking. Then it reviews the literature related to twenty first century education and cognitive teaching, and teaching of literature. Finally it presents a review of research studies related to the present study.

#### ***2.1 Human Learning, Cognition and Cognitive Processes***

The current study attempts to apply cognitive teaching strategies and techniques to develop creative thinking of the students of literature. Thus, the researcher is of the

view that educational psychology, in particular cognitive psychology, plays a foundational role in the present study.

The function of educational psychology as Elliot, Kratochwill, Cook and Travers (2000, p.2) view, is “the application of psychology and psychological methods to the study of the development of learning, motivation, instruction, assessment, and related issues that influence the interaction of teaching and learning.” Lot of laboratory research has been carried out in order to define the nature and process of learning and as a result various learning theories have been developed. These learning theories have been broadly divided into two categories: behaviorist-associationist theories and cognitive – organizational theories. Behaviorists refer to learning as linking stimulus and response together. For them external motivation reinforces learning (Biehler and Snowman, 1993; Ormrod, 2000; Bower and Hilgard, 1986; Klein, 1996; Lovell, 1984; Leahey and Harris, 1985; Sternberg, 2001). Behaviorist theories can be placed into two general categories: classical conditioning and operant conditioning. Classical conditioning is associated with the works of Pavlov (1927) and J.B. Watson (1930) while operant conditioning with Skinner (1938; 1957; 1969; 1972; 1974), Guthrie (1930; 1934; 1952), and Thorndyke (1965; 1968).

On the other hand, cognitivists and gestalt psychologists reject the behaviorist empirical methodology and mechanical trial and error learning and emphasize the role of cognitive processes such as perception, memory, and retrieval etc. For them learning refers to the change in the cognitive structures. (Matlin, 1989; Biehler and Snowman, 1993; Leahey and Harris, 1985; Klein, 1991; Ellis and Hunt, 1989, 1993;

Anderson, 1990; Ashman and Conway, 1997; Ashcraft, 1998; Ormrod, 2000; Solso, 2004 and Reed, 2000)

Anderson (1990) and Ashcraft (1998) are of the opinion that cognitive psychology originated from Wilhelm Wundt's experimental psychological laboratory established in 1878. Wundt attempted to study cognitive processes, thought processes and their combination. In this regard, Sternberg (2001) refers to Gestalt psychology, which he considers as a reaction against behaviorism and structuralism. He further explains with reference to D. Shultz that gestalt means "form", "integral shape" or "fully integrated configuration" (p.18). Gestalt psychology studies an experience as a whole constituted by all events or parts, which play dynamic role. Similarly Bower and Hilgard (1986) highlight the significance of the Gestalt psychology as they refer to the notion of insightful learning introduced by gestalt psychologists, which is opposed to mechanical trial and error learning. They explain with reference to Kohler's experiments with apes from 1913 to 1917 that the flash of some new idea, which brings successful solution to the problem, is insight. Lovell (1984) supporting this view further explains that for gestalt psychology "learning is not restricted to the acquisition of simple statements that can be recognized as right or wrong, but involves the integration of new material into complex network of already existing experiences"(p.42)

Gestalt psychologists, according to Sternberg (2001) regard perception as an "active constructive process" (p.9) and assign great importance to structuring of a problem situation for insightful solution to happen. Their theory of learning is mainly founded on their laws of perception. In this regard Wertheimer's *Productive Thinking*

(1959) is a seminal work. Gestalts laws of perception include figure ground relationship, the law of proximity, the law of similarity, the law of common direction, and the law of simplicity.

The present study attempts to apply cognitive teaching strategies and techniques to develop creative thinking and other higher order thinking skills for the students of literature, hence, the researcher regards it important to review the literature that explains the meaning of cognition and the nature and functions of cognitive processes involved in thinking.

Constructivism, social learning theory, and information processing theory are regarded as notable cognitive learning theories. Constructivist or social cognitive learning theory is proposed by Jean Piaget. Piaget (1928; 1952; 1959; 1970; 1980) contributed a number of studies to investigate the nature of thinking and learning processes in children. His theory acknowledging active involvement of learner's cognition and learning process suggests that children construct knowledge from their past experiences through the processes of assimilation and accommodation. For him learning is enhanced through social interaction through language. Piaget's developmental theory is further developed by Bruner (1961; 1966).

The foundation of social cognitive theory was laid by Vygotsky's (1962; 1978; 1997) research on children's thinking processes. He proposed on the basis of his research that society, culture, and environment play effective role in promoting cognitive growth. In this regard he developed the concept of Zone of Proximal development (ZPD) which refers to the role of guidance by elders and others in the accomplishment of a task assigned to a young learner. Learning strategies such as

scaffolding, peer interaction and apprenticeship are all based on Vygotsky's Zone of Proximal development. Bandura (1977; 1986; 1989) made significant contribution to social learning theory.

Information processing theory of learning was developed after 1950s and draws from constructivism, social cognitive theories and cognitive psychology. It is a collection of theories that are concerned with the development of human cognitive processes.

Cognition refers to the acquisition of knowledge. Reed (2000, p.4) and Ashcraft (1998, p.5), in this regard explain that "cognition involves many mental skills and processes such as pattern recognition, attention, memory, visual imagery, language, problem solving, and decision-making". A number of scholars and researchers in the field of cognitive psychology as for example Solso (2004), Ashcraft (1998), Reed (2000), Ellis and Hunt (1993), and Elliot et al (2000), Matlin (1989), Biehler and Snowman (1993), Ormrod (2000), Bourne et al (1986), Anderson (1990), Stern (1985), and Lahey (2004) refer to information processing model of human cognition. Different information processing models based upon human cognition have been designed such as stage-theory by Atkinson and Shrifin (1968), level of processing theory by Craik and Lockhart (1972), connectionistic model by Rumelhart and McClelland (1986) and parallel-distributed processing model by Goleman (1995). Miller (1956), and Miller, Galanter, E., & Pribram, K.H. (1960), have also made significant contribution to the development of information processing models.

They identify three memory stores in information processing: sensory register, short term memory, and long term memory, and discuss other cognitive processes related to these stores. The detail is as follows:

### ***Perception***

Perception or sensory register has three important aspects: sensory memory, pattern recognition, and attention. Sensory memory or sensory registers is “the most immediately perceptual store of memory” (Leahey and Harris, 1985, p.104). It has three characteristics: first it is much accurate copy of original perception of stimuli or objects and events in the external world, secondly it has capacity to store all the information which affects the sensory receptors, and thirdly it holds information for a very brief period of time. Pattern Recognition refers to the process through which people identify the objects and events in their environment and assign meaning to them. This process as Ellis and Hunt (1993) explain “interprets sensory information by matching that information to previous experiences stored in long term memory” (p.33). The important theories of pattern recognition are known as Template-Matching Theory, Proto-Type Theory, Distinctive-Feature Model, and The Scene Analysis Approach. Attention has been defined as “concentration of mental activity” (Matlin, p.47). It enables one to select and then focus on the certain sensory stimuli for further cognitive processing. It protects the sensory store from being overloaded and makes pattern recognition an easier task.

## *Memory*

Information after it is registered by the sensory register and assigned meaning by pattern recognition is sent to and recorded into more permanent storage that is memory. The most influential models of memory have been developed by Atkinson and Shiffron in 1968, Craik and Lockhart in 1972, Tulving in 1983, 1984, 1985 and 1986, and Rumelhart and McCellard in 1986 (as cited in Solso, 2004, p.254). These models have identified two memory storages commonly known as short-term memory and long-term memory. Short-term memory receives a highly limited number of information from sensory store and holds them for a very brief period of time that is from five seconds to twenty five seconds. It is called working memory because at this stage processing of and working on information is done. At this stage all conscious mental efforts are made and various cognitive functions such as thinking and problem solving are performed. The final component in the structural model of memory is long-term memory. For Ormrod (2000) it has three important characteristics: “a long duration, an essentially unlimited capacity, and a rich network of interconnections” (p.234). Organization in long-term memory is made on the principle of association. The related pieces of information are associated with one another in a network, which Ormrod (pp.231-233) refers to as schemata, and are encoded in the following three ways:

- Verbal form: It refers to remembering things word for word for example names, addresses and verses of poetry etc.

- **Imagery:** It refers to remembering things in terms of their appearance that is shape, color, or sound etc.
- **Semantics:** It refers to remembering things in terms of their underlying meanings.
- **Multiple forms:** It refers to remembering information in multiple ways like encoding verbally as well as semantically simultaneously. The research shows that information coded in multiple ways is retrieved easily.

Following five processes are used in storing information in long-term memory:

- i. **Rehearsal:** It refers to repeating information over and over again without associating any meaning to it. It is also regarded as rote learning.
- ii. **Meaningful learning:** Meaningful learning occurs when newly received information is associated with the already stored information in long-term memory and then reorganized. Hence, a knowledge base or relevant prior knowledge with which new information is related is an essential condition for meaningful learning to occur. Meaningful learning is opposite to rote learning and is referred to as “comprehension or understanding” (Ormrod, p.239).
- iii. **Organization:** For Ashcraft (1998, pp.150-152) organization refers to connecting various pieces of information with one another and with the already stored information in long-term memory. It makes learning and

remembering easy and accurate. Organization becomes effective when it is clustered under some category or within some structural pattern.

- iv. **Elaboration:** Elaboration refers to adding something more. In this process newly acquired information is expanded and elaborated with the help of knowledge already existing in long-term memory. This process helps in achieving better understanding and better ability to interpret things, which consequently result in better storing in long-term memory.
- v. **Visual Imagery:** It is considered one of the very effective ways of storing and recalling information from long-term memory. It means shaping mental pictures of ideas, words, and things. The research has discovered that it is easier to recognize pictures than words and abstractions. Moreover, the details related to a picture are more resistant to forgetting than verbal details. Hence, as Reed (2000, p.141-158) affirms that the cognitive psychologists recommend presenting new material in a visual form rather than in verbal form because it results into better and efficient learning.

A number of cognitive theorists such as Ormrod (2000), Ashcraft (1998), Reed (2000), Solso (2004) and Leahey and Harris (1985) agree that all the above mentioned processes are helpful in linking up various types of information which results into better storage and retention. But Halpern (2003) is of the view that teachers should be aware that “according to standard “memory trace” theories of how we remember, the act of remembering strengthens some memory traces and weakens... or atleast fails to strengthen ... others” (p.6).

## ***Retrieval***

Retrieval involves connecting new information with the existing set of information in memory and then assigning meaning to things. It also involves organization of material. Ormrod (2000) explaining the process of retrieval states:

Retrieving information from long-term memory appears to be a process of following a “pathway of association”. Retrieval is successful only when we eventually stumble on the information we are looking for. We are most likely to do so if we have connected the desired information to something else, presumably something that is logically related to it in long term memory (p.251).

Retrieval involves in some cases reconstruction of material with the help of partially retrieved information as in the case of making stories or drawing pictures. Moreover, human beings have the ability to recall only the required information out of the vast body of existing knowledge in long-term memory. In Stern’s opinion (1985, p.108) “the process of retrieval is facilitated with the retrieval cues such as elaborate rehearsal, information stored in short-term memory and use of mnemonics”.

The cognitive processes of perception, pattern recognition, attention, memory and retrieval as discussed in the preceding pages play foundational role in the process of thinking as is illustrated in the next section of literature review.

## ***2.2 Thinking and Thinking Skills***

This section presents a review of literature, which defines thinking and kinds of thinking. Review of related literature in this section will help define creative thinking and also highlight its significance.

Thinking is the defining attribute of man. For Solso (2004) it is “the crown jewel of cognition” (p.417), and for deBono (1985) it is “the ultimate human resource” (p.7). There is no other being in this world that equally possesses this ability. This fact has been proved by the modern research in neuro- psychology as Restak (1988, p.267) observes that “chimpanzees though they are genetically closest in intelligence to man, are far behind in the performance of higher order cognitive functions”.

Scholars working in the field of cognitive educational psychology as for example Solso (2004), Sternberg (2001), Klein (1991), and Ruggiero (1988) regard thinking as a process, which involves diverse cognitive processes. For Solso it is a “process by which a new mental representation is formed through the transformation of information by complex interaction of mental attributes of judging transformation, reasoning, imagining, and problem solving” (p.417). Ruggiero (1988) and Sternberg (2001) also define thinking in the similar terms. But deBono (1991) defines it in a different manner as he differentiates thinking from knowledge and regards it as an “operational skill” (p.33), which supports intelligence to make effective use of experience. He explains that the function of thinking is to collect information, classify it, and use it in order to perform specific functions and achieve specific goals.

Thinking thus, involves a number of cognitive functions and processes, so educational psychologists have categorized it into different kinds and skills. Vinack (1974, p.5) divides it into two broad categories: reasoning and imagination. Reasoning involves reasoning and logic, decision-making, concept attainment, and problem solving, while imagination involves play, fantasy, past memories and dreams. Sternberg (2001, p.275), in this regard, identifies four kind of thinking: analysis, synthesis, divergent thinking, and convergent thinking. But on the other hand Bloom (1956) in his seminal work classifies thinking skills into six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. These six levels are placed into two categories: higher-order thinking skills and lower-order thinking skills. Lower-order thinking skills include knowledge, comprehension, application, and analysis, whereas higher-order thinking skills include synthesis and evaluation. Bloom's model is considered more comprehensive and useful for educational purposes as we see that using Bloom's model as framework, Newcomb and Trefz (1987) also developed a model of cognitive skills, which comprises four levels: remembering, processing, creating, and evaluating. In this model remembering and processing are regarded as lower-order thinking skills, whereas creating and evaluating as higher-order thinking skills.

### ***2.3 Thinking and Problem Solving***

The present research takes creative thinking as creative problem solving; hence it is considered as appropriate to discuss the literature in this section, which defines the nature and process of problem solving.

A problem is referred to as some situation in which a person attempts to reach a goal but the way is blocked by obstacles, problem solving refers to the attempts made in search of some solution to overcome the obstacle and attain the goal (Lahey, 2004, p.279). Problem solving is a complex and important cognitive skill and involves many complex neurological events. Ashman and Conway (1997) consider it as an “embodiment of cognitive theory” (76) and “cognitive education” for them “involves learning how to solve problems” p.78).

The researchers in the field identify problem solving as a systematic process, which consists of well-defined stages. In this regard, Wallace (1926) in his classic study identifies the following four stages:

- Preparation: It involves choosing a problem and gathering background information
- Incubation: At this stage attention is deliberately diverted to other activities.
- Illumination: At this stage a sudden solution to the problem encountered is achieved.
- Verification: It involves validating the solution.

This model is also supported by Vinack (2006). Bransford and Stein (1984) term these stages as IDEAL that is Identify, Define, Explore, Act, and Look, while Elliot et al. (2000) present DUPE model which refers to “Defining just what the problem is; Understanding its nature; Plan for its solution; Evaluate your plan.” (p.311). Similarly Hayes as cited by Solso (2004, p.455) considers the following stages as crucial in problem solving:

- Identifying the problem
- Representing the problem
- Planning the solution
- Executing the plan
- Evaluating the plan
- Evaluating the solution.

Problem solving in the researcher's opinion, as the stages involved in the process illustrate involves a number of important cognitive processes such as perception, pattern recognition, memory, and retrieval and transference. According to Ashman and Conway (1997, p.77) "when a problem is encountered, all the information related to it, is attended and efforts are made to knit up the information within the problem". This view can be explained in gestalt terms that one needs to recognize how various pieces of information are dynamically organized into a whole. After a pattern is found in the information presented, relevant information is searched for in the memory or knowledge base. Then relevant information is applied to the present situation in order to solve the issue or problem encountered. Thus, insight is considered a very important concept in the discussion related to problem solving. It may be defined as a sudden understanding of a situation, which leads to appropriate use of available recourses in order to obtain the solution. It involves minimum confusion. It is important to understand that the sudden understanding in this regard, however, is not achieved with mechanical trial and error process, but rather with the ability to inspect all the various parts of a situation in order to organize them into a

meaningful whole. For this very reason Bower and Hilgard (1986, p.319) supporting the opinion think that the insightful solutions depend upon the simultaneous availability or presence of all the aspects or resourceful perceptual structuring, organization and arrangement and in this regard, prior knowledge plays a significant role.

The research in the field has discovered that the application of concrete problem solving methods assist to solve the issues systematically. These methods according to Matlin (1989, p.307-313) include Symbols, Lists or Tables, Metrics, Hieratical Tree Diagram, Graphs, and Visual Images.

This section reviewed the literature which helps define thinking and categorize thinking skills. The researcher is of the view that understanding of the nature of human thinking, thinking skills, and processes involved is important in order to define, explain, and understand creative thinking. A review of literature related to creative thinking is presented in the next section.

## ***2.4 Creative Thinking***

This section presents review of literature that helps define and explain the nature and function of creative thinking.

The researcher regards creative thinking as a whole brain process and a combination of convergent and divergent thinking. The process of creative thinking involves generating multiple ideas and then making selection of more useful, effective, or appropriate ideas in order to have a workable solution to the problem. There are a number of creativity scholars who support this definition as for example

Vinack (1974; 2006), Gruber and Richard (1990), Badi and Tajdeen (2005), Perkins (1988), DeBono (1986), Joubert (2001), Duffy (1998), Saaty, (2001) and Ruggiero (1988).

In Vinack's (2006, p.1) opinion "creativity intimately blends realistic (objective) and autistic (subjective) process." This opinion is supported by Badi and Tajdeen (2005, p.ix) and Ruggiero (1988, p.18). These authors consider critical and creative thinking as inseparable concepts. Gruber and Richard (1990) explaining this opinion state, "creative work requires not only "the having of wonderful ideas" (Duckworth, 1987), but the skills and determination necessary to recognize them, exploit them, and assimilate them into valid structures" (p.139). Saaty (2001, p.49) is of the opinion that creative thinking is a combination of divergent and convergent thinking. Similarly Duffy (1998) thinks that in order to respond in a creative manner to the challenges of life, one need to remove completely the "conflict between the two modes of thinking, between logical and intuitive" (p.7). Considering the divergent and convergent aspects of creative thinking, Perkins (1988) regards it as a "process of search and selection" (p.309). deBono (1986, p.237) also thinks in similar terms about lateral thinking. Similarly Joubert (2001) accepting the generative and selective processes involved in creative thinking refers to the five concepts, which define the nature of creative thinking. These concepts for Joubert are "using imagination, a fashioning process, pursuing purposes, being original and judging values" (p.18).

As the discussion given above illustrates creative thinking involves the elements of divergent thinking and convergent thinking. For this very reason there are a number of creativity scholars who regard creative thinking as creative problem

solving, which is a whole brain process as for example Lumsdaine and Lumsdaine (1995), Duffy (1998), Lucas (2003), King (2003), Clegg (2000), Flack (1997), and Halpern (1996).

For Halpern (1996, p.370) creative thinking is a multistage process that consists of identifying a problem, deciding what is important about the problem, and arriving at a novel way of solving it. To explain this view the author cites Parnes, Noller, and Biondi (1977) who regard creative thinking as “three Ss: sensitivity, synergy, and serendipity” (p.368). For them Sensitivity involves five senses, which help to identify a problem. Synergy synthesizes all parts into a workable whole, and Serendipity involves sudden insightful solutions.

Lumsdaine and Lumsdaine (1995, pp.17-18, 75-81) referring to creative thinking as creative problem solving are of the opinion that this process involves collecting information about some problem, analyzing it in order to define the problem and understanding it. Many ideas are generated, elaborated and even synthesized to find a better solution. After that the results are further improved and tested for successful implementation. The authors consider creative problem solving a whole brain process and support their opinion with reference to Ned Hermann’s four-quadrant brain dominance model, which divides the left and right hemispheres into further two parts. The left hemisphere has two halves: Quadrant A and B, being capable of logical, analytical, technical thinking they help in organization, structuring and planning. Similarly, the right hemisphere has two parts: Quadrant C and D being imaginative, intuitive and visual faculties is related to emotions, senses, feelings and spirit. Flack (1997) also regards creative thinking and critical thinking as equally

important for creative problem solving. King (2003) accepting creative thinking as a whole brain process explains the functions of the two halves of the brain as he states:

The more critical, linear and logical left hemisphere of the brain supplies the essential raw data for the right hemisphere to synthesize. It does this via the corpus callosum, a bundle of more than 200 million nerve fibers, which forms a bridge between the two cerebral hemispheres and allows them to communicate. In addition, the left hemisphere is responsible for the analysis and the evaluation of any ideas, insights or solutions generated by the right hemisphere (p.2).

Clegg's (2000) definition of creative thinking as whole brain process is almost identical to the opinion of King quoted above. For him creative thinking is creative problem solving process and thus, is "a mix of the two [halves of the brain] (p.4). Similarly Lucas (2003) rejects the idea that creative thinking is only a right brain process and supports the opinion that it is a whole brain process.

The researcher is of the opinion that creative thinking is a whole brain process, which involves generating ideas, evaluating ideas, and selecting ideas, hence its basic function is to rearrange structures and patterns and bring novel and original solutions to the problems. deBono (1986, p.237; 1987, p.190) in this regard, considers creative thinking as a generative process, which helps rearrange the available resources. In this sense it is like an escape from the main track or established patterns and traditional solutions. It leads to more sidetracks, gives more options resulting into

new patterns. It is hence, shifting of attention from elements of common and routine observation to different and unusual ones. This further results in discovering unusual and original solutions. This opinion is also supported by Saaty (2001, p. 56). Lumsdaine and Lumsdaine (1995), in this regard, are also of the opinion that creative thinking is flexible and original and its function is to refashion elements and restructure patterns and redefine problems. It is, for the authors like “playing with imagination and possibilities to new and meaningful connections and outcomes while interacting with ideas, people, and the environment” (p.14).

The characteristics of creative thinking as listed in Lipman (2003, pp.245-247) sum up the discussion on the nature and function of creative thinking. For him creative thinking involves originality, productivity, imagination, independence, experimentation, holism, expression, self-transcendence, surprise, generativity, maieuticity, and inventiveness.

For the purpose of the present study creative thinking will be seen as a whole brain process or a combination of divergent and convergent thinking which involves the processes of generating ideas and making selection. In this sense, it will also be taken as creative problem solving.

### ***Process of Creative Thinking***

Creative thinking, as the discussion in the preceding pages shows, is a dynamic interplay of many cognitive activities. For this very reason creativity scholars have identified various stages involved in the process of creative thinking. For Wallace

(1926) and Vinack (1974; 2006) the phases of creative process include preparation, incubation, illumination, and verification.

The researcher regards creative thinking as a dynamic process and is of the opinion that it is interplay of all these four overlapping activities, which may or may not occur in well-defined sequence as illustrated above.

It is important to mention here that the sudden insightful solutions do not occur in vacuum but are supported by the knowledge base of the one engaged in the process of thinking. The knowledge base is the prior information people store in memory. Thus finding a sudden solution to a problem is actually the flexible transference of prior knowledge to a new situation in a new style or with new and original combinations. Boden (2001) explaining it states, “creativity and knowledge are not opposed to each other...creative thinking cannot happen unless the thinker already possesses knowledge of a rich and/ or well-structured kind” (p.95). This phenomenon also supports the view that creative thinking is a combination of imagination and realistic thinking. It is the deliberate reorganization of data and application of skills and techniques.

### ***Nurturing Creative Thinking***

The present study aims at developing creative thinking of students by applying cognitive teaching strategies, techniques and tools. This section, therefore, presents review of literature, which supports the view that education should contribute in

developing creative thinking and other higher-order thinking skills of students, and suggests techniques, strategies and tools to enhance creative thinking.

There are a number of scholars and educationists who emphasize the need to develop students' creative thinking and other cognitive processes as for example Underbakke, Borg, and Peterson (1993), Todd and Shinzato (1999), Goldberg, Mazursky, and Solomon (1999), Kuhn and Dean (2004), Lewis and Smith (1993), Saadawi (2001), Sawyer (2000), and Sonjae (n.d.).

The present research regards nurturing thinking skills as essential to help students adapt to the rapidly changing complex world of today. In this regard Underbakke, Borg, and Peterson (1993) consider teaching of thinking as “one of the highest priorities of education” (p.1). These authors consider thinking skills as a necessary tool to be equipped with in order to manage the issues of the complex modern world. Similarly Kuhn and Dean (2004) emphasize the need for developing students' thinking skills in particular critical thinking in order to prepare them to contribute dynamically in today's complicated world. For them in today's world an educated person should be equipped with “the skills of inquiry and argument” (p.7). There is a growing volume of research which highlights the significance of thinking skills in educational programmes. It is realized that inclusion of thinking skills in curriculum has a positive impact on the teaching of academic disciplines. Lewis and Smith (1993) support this opinion and accept that the teaching of higher-order thinking skills makes the teaching of all disciplines effective. According to their definition higher-order thinking skills include problem solving, critical thinking, creative thinking, and decision-making. These authors strongly feel the need for

research on “how to teach such skills [higher-order thinking skills] and how to incorporate the findings from that research into in-service and pre-service preparation programs” (p.137). Todd and Shinzato (1999) emphasizing the need to develop creative thinking recommend two models: The Autonomous Learner Model developed by George Betts (1991) and The Renzulli Model developed by Joseph Renzulli (1997) for developing creative thinking and personal growth. For these authors training in creativity helps students to be self-sufficient and independent and this in the researcher’s view is one of the important aims of education. Similarly Goldenberg, Mazursky, and Solomon (1999) support the view that students’ thinking skills need to be developed. In this regard, they are of the opinion that a “structured process” (p.1496) is more congenial to help generate creative ideas. On the other hand, Swayer (2000) is of the opinion that the key factor needed to enhance creativity is to have the ability of generating ideas freely. In this regard, he refers to Picasso’s “free form painting” (p.149), which he finds similar to generating ideas by suspending judgment. He regards this process as an important factor for generating novel ideas. Saddawi (2001) pleads for freedom of thought and expression of one’s creativity. She regards “oppression” (p.36) and “inhibitions” (p.36) as two negative forces in education system because as she thinks they damage the creativity of students. It can be concluded from Swayer’s and Saddawis’s discussion that there are three important aspects of creative thinking, i.e., flexibility, discovery and experimentation.

Learning and education are concerned with changing and altering natural patterns into different and better ones. Similarly creative thinking is nurtured with the

deliberate act of focusing attention on certain aspects of an object or situation during the process of perception. Hence for deBono (1991, p.77, 95), “the teaching of thinking is not the teaching of logic, but the teaching of perception” because human mind is a “pattern making and pattern using system” and has a brilliant ability to form and use patterns. He further explains that the flow of incoming information is linked up and organized into set patterns and thus meanings are assigned to the objects of perception, which help make a sense of the world around. He therefore, suggests that one needs to develop “some artificial framework” (103) and make efforts to deliberately use it in order to direct one’s attention to or hold it on the aspects to be needed for further processing in creative thinking. He has discussed the techniques for this framework in his different works as for example (1985; 1990; 1986; 1991). He (1986) suggests the techniques of exaggeration, defamiliarization, repetition, highlighting, extension and diversion, giving random input, rotation of attention, reversal, cross- fertilization, the end before the means, and juxtaposition. He (1990; 1991) also regards techniques of fraction and bird-watching method important for organizing one’s creativity. The detail is given below:

- Exaggeration: This refers to magnifying, minifying, substituting, reversing, and combining elements.
- Defamiliarization: This refers to presenting familiar things in an unfamiliar way either by rearranging elements or combining them in different and unusual way.
- Repetition: This refers to repeating the key points or figures or objects in order to hold attention on them.

- **Highlighting:** This refers to using techniques such as pictures, colors, font size, and writing style etc.
- **Extension and Diversions:** Extension refers to adding more information into existing stock in order to move in a specific direction while diversion demands unusual solutions or answers.
- **Giving random input:** This refers to providing data in random form and not in organized set and known categories. It disrupts the set patterns and thus they reform themselves into new and unusual way.
- **Rotation of attention:** This refers to the breaking up of the problem into in different parts. In other words it is separating parts of a whole and attending them individually. This delays the attention, which may lead to a sudden restructuring of a pattern into a new form or may generate new ideas.
- **Reversal:** This method rejects as deBono states (1990), “what is there and fixed in order to move away in the opposite direction” (p.141). It refers to changing the expected modes and turning the things upside down. This method encourages looking at the things in a different way and is concerned with new arrangement of existing patterns, which consequently lead to find new information.
- **Cross- Fertilization:** This refers to encouraging people with different approaches to interact. It helps find a novel solution or idea.
- **The End before the Means:** It means to start from the end instead of from the beginning to solve open-ended problems.

- Juxtaposition: This refers to bringing two different things together in a completely neutral manner like comparing the moon with green cheese and then examining the known items i.e. the moon in new and unusual way.
- Fraction: It refers to breaking down a situation into fractions so that as deBono says (1990) “one can then restructure the situation by putting the fractions together in a new way” (p. 132). This technique enables one to focus attention on all parts of a situation or a task separately and then make an attempt to put them together in a new and creative fashion.
- The Bird-watching Method: It refers to making a deliberate attempt in order to locate certain characteristics or features of an object or a situation. This method helps hold attention where required, and note down desired characteristics of the situation encountered.

Edward de Bono (1990; 1985) has also introduced the tools of The Plus, Minus, and Interesting Points (The PMI) and Provocative Operations (PO) to direct perceptual process.

- Po: “Po” (1990, p.225) involves juxtaposition of two unrelated things. It facilitates unconnected jumps in thought processes and open new possibilities. The PO tool helps restructure patterns of thinking in novel fashion. It is considered extremely important for fostering creative thinking.
- The PMI: This tool helps attend to an object or areas from three different directions in order to enable one to generate a variety of ideas. “P” stands for

plus points, “M” for minus points, and “I” for interesting points (1985, p.11-19).

These thinking skills tools and strategies suggested by deBono are used in various thinking skills programmes and educational setups the world over.

Creativity scholars and researchers consider visuals as “powerful tools” (Feden and Vogel, 2003, p138) to help students draw and focus their attention on desired areas, and activate their generative thinking. In this regard a number of strategies and techniques have been suggested to use visuals and graphics. The techniques of Mind Mapping suggested by Buzan (1988) and Lucas (2003), Preparing Checklists and attribute listing suggested by Halpern (1996), Lotus Blossom suggested by Michalko (1994), and Preparing Discussion Webs suggested by Tierney, Readence and Dishner (1995) are noteworthy in this regard:

- **Lotus Blossom technique:** This technique is designed in accordance with the gestalt concept of a whole made up of dynamic parts. It works to break the problem into parts for further discrete analysis, and generating novel ideas. This technique according to Michalko (1994) generates the process to unfold new/sub themes related to the central idea or issue. It utilizes the ever-widening circles or petals to discover sub themes or new ideas. This technique is practiced with the help of the diagram illustrated below:

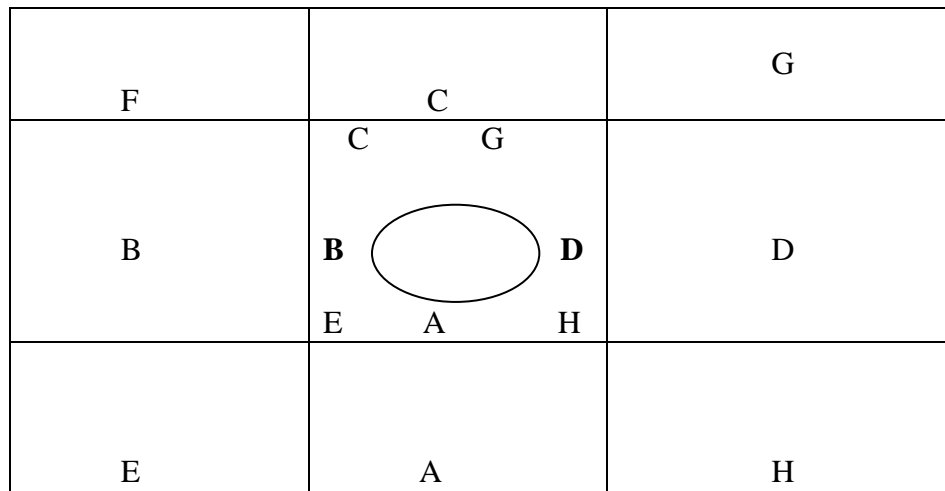


Figure1. Lotus Blossom Technique

- **Mind mapping:** Human mind builds associations and links. The memory comprises of a network of associated concepts and ideas. Each idea or word is linked up with various other ideas and concepts. The drawing pattern of the mind map is similar to the associative pattern in long-term memory. For Tony Buzan (1988, pp.115-129) mind mapping is extremely useful for note taking and organizing and generating ideas in a creative fashion.
- **Creative Ideas Checklist:** It refers to preparing a checklist of diverse questions and categories, which are to be applied to the situation encountered. Questions guide the thinking to move beyond the expected answers or assumptions and search for novel ideas. This process thus, supports thinking to be flexible and creative (Halpern, p.383).
- **Attribute Listing:** Attribute listing refers to preparing a list of all the characteristics of an object or a situation. It helps examine the situation or the object closely and consider the possibilities of recombination and

modification (Halpern, p.384). This strategy brings into use both the right brain and the left brain. Thus, it is very effective for developing creative thinking.

- **Discussion Web:** This method is also called “think- pair- share discussion paradigm” (Tierney et al. (1995, pp.242-245). This graphic aid helps students classify their thinking. Preparation of discussion web starts with pair work and then expands into group activity. Discussion webs, on one hand, help generate ideas systematically, and on the other hand, provide students with the opportunity to share their responses and arrive at an appropriate conclusion. Designing discussion webs involves analytic and creative thinking processes.

The present study takes all the above-mentioned techniques and strategies into consideration for preparing teaching activities and worksheets for the experiment groups.

Transference of learning refers to the influence of previous learning on the learning of new information or skills. In other words it means the influence of things learnt at a certain time in certain situations on future learning and performances in different situations. Transfer of learning is regarded as one of the major objective of teaching. The process of retrieval facilitates transference of learning. Retrieval as discussed earlier refers to the ability to access information stored in memory or knowledge base. It thus helps one find out appropriate answers or solutions to the problem, and generates multiple solutions. It also provides escape from the known patterns and helps in building up new and unusual ones. For this very reason, the researcher considers the training of retrieving ability as essential for nurturing

thinking. In this regard, Elliot et al. (2000)) and Ormrod (2000) consider the following as effective retrieval aids:

- **Imagery:** It refers to visualizing events and objects.
- **Cues:** Cues refer to the techniques that help recall information from memory store.
- **Method of loci:** It refers to the use of familiar locations in order to store things visually in memory. Visual encoding with this method provides ease to the process of retrieval of required stored information.
- **Elaboration:** It refers to adding to information, which is to be learnt. It helps personalize information.
- **Making Multiple Connections:** Meaningful learning refers to deliberately connecting new information with the existing relevant knowledge stored in the memory. Making multiple connections is one of the very important techniques used for effective retrieval. It refers to associating new information with existing information in knowledge base.
- **Over Learning:** For Ormrod (2000) it refers to intensive practice and attaining the level of 'automaticity' (p.252). The material, which is practiced to the level of automaticity, is easily retrieved and can effectively be transferred to other situations.
- **Using Information Frequently:** It refers to making frequent use of information in different forms.
- **Well-Organized Material:** The well-organized teaching material presented in an organized way enables students to recognize the structure of material

and discover the underlying principles. The discovering of underlying principles helps students formulate a general rule, which supports future transference of information easily. Teaching that aims at helping learners discover rules and principles instead of facts, facilitates transfer and retrieval.

- **Identifying Important Features:** It refers to attracting students' attention to certain important features in the material presented and then encouraging them to use them in other tasks more independently.
- **Authentic Material and Activities:** Authentic material and activities refer to the material and activities, which are closely similar to real life situations or are taken from real life. The use of authentic teaching material and activities in classroom enables the students to transfer their learning easily and effectively to real life situations.
- **Context free Teaching Material:** Context free teaching material refers to the material, which is related to other subjects as well as practical life situations and experiences. This practice encourages students to transfer their learning to other situations.

Knowledge base refers to the information stored in long-term memory. The researcher is of the opinion that the information encoded successfully in long-term memory help establish a rich knowledge base, which supports creative and generative thinking. In this regard, Ashman and Conway (1997, p.41) state, "it serves as the building blocks for learning". They explain that the information includes "declarative

knowledge” or facts and “procedural knowledge” (42), which refer to the processes used to perform various tasks. They also affirm that both types of knowledge play foundational role in all learning situations because as they explain “what is learned and how it is learned, is based upon what a person already knows” (p.42). This view is also supported by Good and Brophy (1997), Biehler and Snowman (1993), and Bransford and Stein (1984). For Good and Brophy (p.397) students are required to connect new information with the familiar and related knowledge stored in memory in order to be able to solve problems, think, interpret, and reason. Similarly Biehler and Snowman (p.427) regard knowledge base as necessary to support discovery learning. Bransford and Stein are of the opinion that appropriate knowledge base serves as “conceptual tool” (p.52) to help one remember information effectively and it also supports the ability of inference and comprehension. Supporting this view Boden (2001, p.96) refers to three types of creative thinking: combinational, exploratory and transformational. Boden’s view of knowledge base is similar to that of Good and Brophy and is more comprehensive than that of Biehler and Snowman and Ashman and Conway. For her all these three types of creative thinking are grounded in previous knowledge, but the way this knowledge is used differs in each case. She further explains that combinational creativity combines new ideas with the old ones in an unusual way as in poetic imagery, exploratory creative thinking explores with the help of certain available rules new possibilities, and transformational creativity generates ideas and new set ups by making significant alteration in rules as for example changing painting styles from “brush stroke” to “brush dote” (p.96).

There are various devices and techniques such as advance organizer, rehearsal, elaboration, visual aids and imagery, and analogies etc., which are helpful to organize information for effective encoding in long-term memory store. The devices and techniques are explained in detail below:

- **Advance Organizer:** The technique of advance organizer is regarded as the best way to relate new information with the existing one in memory store. Advance organizers function as scaffolding because they provide general overviews of new information, which help organize information in a meaningful way for effective learning. Biehler and Snowman (1993, p.442) support the view as they state:

Advanced organizers are introductory materials that provide an organizing structure to help students relate new information to existing knowledge schemes.

- **Projects:** The present study takes teaching with projects as one of the important pragmatic teaching methods to develop student's knowledge base. Henry (1994) who considers project work as "enquiry process" (p.11) and thinks that a project "allows students a measure of choice responsibility of their learning, and a consequence is a great motivator" (p.07). He further explains that while working on projects, students collect material, organize it, and present it, so projects involve the skills of analysis, synthesis, and evaluation.
- **Visual Aids:** Visual aids such as films, documentaries, photographs, charts, and graphs and other illustrations facilitate the task of building knowledge base (Peek, 1993). Visual aids present information in concrete form so lessen

help learners assimilate and accommodate abstract information acquired from different books.

- **Synectics:** Creative thinking is developing new and innovative mental structures. Synectics are key instruments to nurture creative thinking. Synectics refer to thinking with metaphors and analogies. Thinking with metaphors and analogies supports the mind to establish new patterns. Joyce and Weil (1996) provide detailed discussion in this regard. For them metaphor and analogy refers to marking out similarity between two objects, which are basically dissimilar. In other words their function is synergic because they combine two objects, which are basically dissimilar. Human mind as the research shows tends to seek similarities, make connections, and build patterns; hence, use of metaphors and analogies can support imagination and insight to give creative output. Synectic exercises commonly make use of three basic types of analogies known as, “personal analogy”, “direct analogy” and “compressed analogy”(pp.241-243). Personal analogy requires a first person description of the facts. It refers to empathizing with the object to be compared. Direct analogy helps view things in a new way. It refers to comparison between two basically different objects. Whereas, compressed analogy refers to the “distance between the frames of reference” (p.243) as it describes the objects in two words that are opposite to each other. Hence, analogy or metaphor is a powerful tool to enhance creativity, because it forces the mind to be flexible and make attempts to find new ways in order to

connect things. Saaty (2001) also regards synectics as one of the important technique to develop creative thinking.

Thus the research reveals that the use of analogy maximizes students' output in terms of creative thinking.

### ***Problem Solving and Creative Thinking***

Problem solving according to Ashman and Conway (1997), Bransford and Stein (1984), and Elliot et al (2000) involves following three major stages:

**Stage 1:** Confrontation with a problem: Problem presentation, identifying a problem, choosing a problem

**Stage 2:** Working towards a solution: Collecting data or gathering information, analysis, making attempts

**Stage 3:** Solution: Application, evaluation, and verification

The major stages as mentioned above testify that problem-solving process involves both convergent and divergent thinking and in this sense it is an exercise to develop creative thinking. The researcher is of the view that creative problem solving abilities of students can be enhanced if the following principles for designing the teaching activities are given due consideration:

- Major stages in problem solving process
- Concrete methods of problem solving: charts, diagrams, figures, graphs, visual images etc.
- Gestalt principle of whole and insight

- Bloom's ranking of thinking skills and taxonomy of questions: Bloom (1956) ranks thinking skills according to the following sequence:

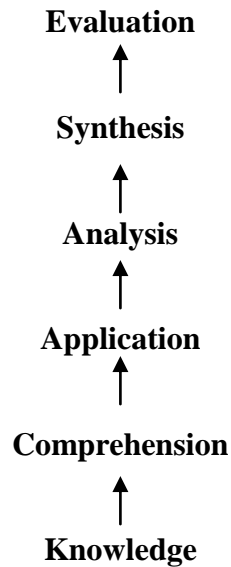


Figure 2. Bloom's ranking of thinking skills and taxonomy of questions

The researcher is of the opinion that teaching activities and questions as suggested by Bloom's taxonomy of questions and ranking of thinking skills help give students a systematic practice in creative problem solving. Feden and Vogel (2003, pp.119-120) in this regard suggest dividing questions into two levels according to Bloom's ranking of thinking skills: Lower-level questions and higher-level questions. They further explain that the lower-level questions are for gathering knowledge, comprehension, and application, while higher-level questions aim at developing skills of analysis, synthesis and evaluation.

The Whole Brain Thinking: creative thinking as the researcher defines is whole brain thinking. Therefore, the researcher is of the opinion that the four-quadrant brain model of thinking preference as discussed in detail in Lumsdaine and

Lumsdaine (1995) can be effectively used as a model to design teaching strategies in order to develop students' creative problem solving abilities.

### ***Brainstorming and Creative Thinking***

Brainstorming for Vinack (2006), Saaty (2001), Lumsdaine and Lumsdaine (1995), and deBono (1990), is one of the most effective tools to support and nurture creative thinking. deBono providing further explanation says that it is an idea generating tool because it provides “formal setting for the use of lateral thinking”(p.149) or creative thinking. For him it provides practice to the three basic principles of creative thinking: attention, escape, and movement and encourages whole brain because it performs two important functions known as “cross stimulation” and “suspending judgment” (p.149). It is a group activity so ideas are often stimulated by the ideas generated and supplied by other members. The process of ‘cross stimulation’ in a brainstorming session not only helps generate ideas but also converts trivial ideas into effective and practical ones.

Similarly Lumsdaine and Lumsdaine (1995, p.1999) are also of the opinion that brainstorming aims at generating as many ideas as possible, even wild and fantastic ideas are not rejected, and judgment is deliberately suspended during the session. Evaluation is done at the end. In the process of evaluation useful ideas are separated from the irrelevant ideas.

For Lumsdaine and Lumsdaine (1995), pp.204-108) there are three main methods for brainstorming called verbal brainstorming, brainwriting and interactive brainstorming. Alex Osborn (1963) developed the method of verbal or classical

brainstorming. It is usually conducted in groups and works to encourage the flow of imagination. Even wild and irrelevant ideas are welcome. Brainwriting for them refers to written brainstorming. A brain writing session though lacks direct verbal interaction, which is the dominant feature of verbal brainstorming, yet it works to encourage shy people to participate. In brainwriting sessions participants are encouraged to write their ideas relevant to the problem presented and briefed on papers or charts and then exchange with one another. In the end ideas are collected, discussed, evaluated and implemented. The well-known and useful brain writing methods are gallery method, pin card method, nominal group technique method, electronic and Internet brain storming and bulletin board method. Interactive brainstorming combines the techniques of verbal and written brainstorming. The important interactive brainstorming techniques are idea trigger method and integrated problem solving.

All the strategies, techniques, and tools to nurture creative thinking discussed and reviewed in detail in the preceding pages are incorporated in Torrance incubation model to develop creative thinking. The model according to Murdock and Keller-Mathers (2002) includes three stages: “Heightening Anticipation”, “Deepening Expectation”, and “Extending Learning” (p.7). The first stage includes: “(a) Create Desire to Know; (b) Heighten Anticipation and Expectation; (c) Get Attention; (d) Arouse Curiosity; (e) Tickle the Imagination; (f) Give Purpose and Motivation.”(p.8). While the second stage includes:

- (a) Digging Deeper (diagnosing difficulties, integrating information, synthesizing, elaborating ;(b) Looking Twice (deferring judgment, keeping

pen, searching for new information, evaluating; (c) Listening for Smells (making use of the senses); (d) Crossing out Mistakes or Talking/ Listening to a Cat (understanding your feelings in response to information; making guesses; checking, correcting, modifying, refining, diverging); (e) Cutting Wholes to See Through (summarizing, getting the essence, simplifying, discarding, targeting/ focusing); (f) Cutting Corners (summarizing, getting the essence, simplifying, discarding, targeting/ focusing); (g) Getting in Deep Water (searching for unanswered questions, dealing with taboos, confronting the unimaginable, being overwhelmed by complexity, becoming absorbed or unaware); and (h) Getting Out of Locked Doors (solving the unsolvable, going beyond more and better of the same, opening up new vistas)” (p.9).

The third stage includes:

(a) Having a Ball (have fun; use humour and laughter); (b) Singing in One’s own Key (give information personal meaning; relate to personal experience); (c) Building Sandcastles (imagine, fantasize, search for ideas); (d) Plugging in the Sun (work hard; find and use available resources); and (e) Shaking Hands with Tomorrow (relate to future image, that which is desired or envisioned, but has not occurred yet) (p.11).

Similarly Lucas (2003, p.40) supporting the strategies suggested by the model elaborates that in order to encourage creativity teachers need to encourage active learning, assign more importance to individual interest than curriculum, encourage personal and emotional responses, pose questions, apply problem solving approach,

assign open ended problems, introduce multiple models and examples, keep classroom environment flexible, use audio-visual aids, encourage collaboration and cooperation, and recognize multiple intelligences.

Three staged model discussed above can serve as a guide to develop cognitive teaching models in order to nurture creative thinking and other-higher order thinking skills.

## ***2.5 21<sup>st</sup> Century Education and Cognitive Teaching***

The present study considers it the requirement of the twenty first century education to develop creative thinking and other higher-order thinking skills of students. Therefore, it attempts to suggest techniques and strategies that help develop students' creative thinking and other higher order thinking skills. This section thus, presents review of literature that takes education in the 21<sup>st</sup> century postmodern context as an effective tool, which can equip man with necessary skills to face all diverse and new challenges and emphasizes the need for cognitive teaching methods.

Gould (1993) thinks that education in the twenty first century is a “prime mechanism” (p.148) for an effective human resource development. Rao, (1997) supports this view and thinks that education can be used as an effective tool to prepare a “qualified and creative workforce” (p.2). Similarly Rao (1996) views education as an effective means, which can establish harmony between man and his ever-changing surrounding and contributes in effective human resource development.

Thus education today, in researcher's opinion, is a process that should enable learners to acquire necessary skills to cope with the bombardment of ever-increasing information, deal with the programmed patterns of life, manage the competitive

market with innovative schemes, be flexible, and able to work in collaboration with global community. Supporting this opinion Geertsen (2003, p.16) thinks that teachers and students are required to “increase their inclination and ability to use different types of higher-level thinking” in order to encounter the changes brought by the twenty first century. Education today, needs to prepare learners to lead, to advance, to process information, to create new resources, to generate multiple solutions to problems, to have the ability to reach set goals from various directions, and to be able to live in harmony with people around.

The present research serves to introduce change in traditional teaching pedagogy and considers cognitive teaching techniques and strategies as necessary to develop students’ cognitive abilities. There are a number of researchers and scholars who advocate this approach as for example Fien (2001), Feden and Vogel (2003), Ruggiero (1988), Safran (2001), Bruer (1994), Weimer (2003), Craft (2001), and Halpern (2003).

Fien (2001) recommends a pedagogy, which is “student-centered and interactive enquiry-based” (p.135) and motivates learners to “explore questions, issues, and problems...” (p.135). Learners should be trained to collect information from different sources and have abilities and skills to relate and interconnect information, and use facts as “the building blocks of new solutions” (p.104). Similarly Feden and Vogel (2003) emphasize to help learners bring change in their cognitive structures and see the world from multiple perspectives. In this regard, they suggest designing instructional methods, which are based on research in cognitive psychology.

Discussion in the preceding pages makes it clear that 21<sup>st</sup> century education is focused to prepare people who are flexible, multi- skilled and multi-tasked, dynamic, efficient, problem solvers, and creative explorers of resources, who bring harmony between knowledge and creativity. The aims and objectives can be achieved if attention is focused on developing creative thinking and other higher-order thinking skills of young learners, so that they can contribute positively and productively in shaping a secure future for mankind.

Safran (2001) supporting cognitive teaching thinks that it contributes to make learning creative and “mindful learning”. Explaining ‘mindful learning’ she further states:

While attaining knowledge or skill the mindful learner is open to new information, trying to create new categories all the time and recognizing that any perspective is one among many. The mindful learner reflects on the subject matter, turning it over and seeing it from many angles while processing the information. The learner in such a way then takes in the information that he or she can use it in a new context or change it to fit an old one – or, indeed, change the context to reflect or fit the learning (p.81).

In Craft’s opinion (2001, pp.58-59) education directed to promote cognitive growth deepens learners’ understanding, help them be creative and flexible in opinions and attitude, have the desire to explore alternatives and investigate, and be ready to take risks. Ruggiero (1988) also recommends teaching methodology, which can help shift, the “emphasis from recall of knowledge to comprehension and application of knowledge to solve problems” (p.97) and makes learning meaningful and life

relevant. Weimer (2003) recommends the instructional design, which develops learners' intellectual skills, and trains them to take the responsibility of their learning and knowledge building. Similarly Halpern (2003) regards teaching for transfer as one of the primary goal of teaching in the modern times and recommends use of laboratory research in human cognition to develop pedagogical designs. Anderson (2004) supports the use of research in cognitive psychology in designing classroom activities, and recommends using dramatic activities in order to facilitate students to work in authentic contexts. For him dramatic activities support situated learning and nurture students' cognitive skills. Bruer (1994, p2) also, in this regard, recommends consulting cognitive sciences in order to develop useful instructional methods and learning theories.

Thus, scholars and researchers who support cognitive education are of the opinion that the cognitive instructional methodology helps foster creative thinking as it promotes curiosity, spirit of exploration, spirit to seek more than one answer, and attitude to generating possibilities. It also works to activate cognitive processes such as attention, memory, retrieval, transference, and other higher-order cognitive processes, which result into development of higher - order thinking skills.

Teaching of literature is presently directed to impart inert knowledge and no attempts are made to arm literature students with necessary skills to manage the complicated issues and challenges of the present world. The crisis in the situation justifies the need to apply cognitive teaching strategies and techniques in teaching literature. Cognitive approach to teaching literature can assist to use literature as a tool to teach creative thinking because “good literature”, as Turner (1987, p.9)

observes, “masterfully evokes and manipulate our cognitive apparatus.” A growing interest has been observed in literary scholarship to establish relationship between literature and cognitive psychology as for example Jackson (2003), Meskin and Weinberg (2003), Richardson and Steen (2002), Knapp (2004), and Turner (1991).

Jackson (2003) observes strong ties between literature and cognitive psychology because for him literature is actually the expression of mind and culture and the business of cognitive sciences and evolutionary psychology is to investigate scientifically history and levels of culture and mind. Meskin and Weinberg (2003) establish links between cognitive psychology and literature. They explain the nature of affective response to literature with reference to “simulation theory” (p.18). There is a significant volume of research which confirms that cognitive science has enriched the study of literature as Richardson and Steen (2002) are of the opinion that cognitive science has added to the value of literary studies. Cognitive psychology has helped explore different perspectives of reading and analyzing literature such as cognitive poetics and reader response theory. The author also refers to MLA’s approval for creating new discussion groups in cognitive approaches to literature. Similarly Knapp (2004) with reference to a number of studies points out that cognitive psychology will guide to devise better methods of literary analysis and comprehension. For the author cognitive psychology will bring study of literature closer to the requirements of practical world. Turner (1991) taking a different position from these authors provides a study of human mind through language and literature and illustrates how metaphors and image schema affect thought process. He pleads for interdisciplinary research in humanities.

## **2.6 *Teaching of Literature***

This section reviews the literature related to various approaches to teaching literature. The literature reviewed also highlights the significance of applying cognitive teaching strategies and methods in order to develop students' creative thinking in the context of the twenty first century.

According to Foster (2003) in teaching learning setting of literature efforts are made to employ "a grammar of literature, a set of conventions and patterns, codes and rules to inform the reading" (p.xiii), and develop some logical interpretation of texts. There has been a lack of systematic training in how to plan teaching literature, how to teach literature, and how to manage literature classrooms (Farris, 2004, p.1). Literary theories from decade to decade, as the researcher views, have been serving as guiding principle to introduce approaches to interpreting literary texts in classrooms. The significant approaches include biographical-historical, social-moral, formalistic and new critical, psychoanalytical, feminist, Marxian, post-colonial, deconstruction, new historical, and reader response.

The traditional biographical, historical, philosophical, and moral approaches to the study of literature, according to Guerin et al. (2005) remained the guiding principle for centuries. This approach was rejected by Formalist and New Critical thought as the proponents claim that these are the linguistic devices alone which make "literature literary" (Rivkin and Ryan, 2002, p.3). Freund (1987, pp.40-65), Lynn (1994, pp.23-32), Ryan (2004, pp.1-6), and Eagleton (1996, pp.2-5) all are of the opinion that for the New Critics the form of a text determines its meaning. The concern of the New Critics with the language and the form led to setting up the

tradition of close reading of literary texts. Close reading involves a scientific practical analysis in surgical manner of various external parts of a text such as form, meter, rhythm, and linguistic and rhetorical devices. But there are many literary scholars who consider literary criticism, as Eagleton says a “part of the political and ideological history” (p.169) as for example Selden (1989, pp.94-164) refers to twentieth century literary critical movements such as Marxism, Feminism, New Historicism, and Post Colonialism, which assign great importance to the socio-political, cultural, historical and ideological context of a literary text. These movements again revived interest in interpreting literary texts into socio-political, philosophical, and ideological contexts.

The second half of the twentieth century is dominated by the post structural thought or Deconstruction. In Deconstruction as Zima (2002) refers to Derrida who thinks, “meaning can never be present, since it developed in a continually open context of reference and thus becomes subject to a change” (p.43). This view brings the interpreter, reader, or critic into spotlight and makes him/her a co-creator.

Thus post structuralism assigned the responsibility of meaning making to the reader and it led to the development of new methods of literary analysis. In this regard, Reader Response Criticism became a major method to interpret literary texts. The present study uses the assumption that the application of Reader Response approach to literary analysis in classroom facilitates cognitive processing and thus helps students be active learner. This view is supported by Freund (1987) as she explains:

Theories of reader-response seek to revise the aims and methods of literary study not only by reminding us that the reader is an active participant in the production of meaning, but also by impersonating or characterizing in some form or other, a reader who assumes dominance or authority over a text (p.152).

Lynn (1994, pp.5-7, 47-52), Murfin (1989, pp.139-147), Davis and Womack (2002, pp. 51-53), and Eagleton (1996, pp.64-76) all support this opinion and explain that Reader Response approach assigns readers active role in making meaning of literary texts. Recent approaches such as contextualization (Weber, 1996) and cognitive poetics (Steen and Gavins, 2003) explore other dimensions of Reader Response approach. Explaining the contextualization approach Weber (1996) says:

Meaning and stylistic effect are not fixed and stable...but they have to be seen as potential which is actualized in a (real) reader's mind, the product of a dialogic interaction between author, the author's context of production, the text, the reader and the reader's context of reception- where context includes all sorts of socio-historical, cultural, and intertextual factors (p.3).

Weber's view is supported by Birch (1996, pp.206-220) as he accepts the active role of a reader in his theory about reader's intertextuality. Similarly Cognitive poetics, the approach to literary analysis introduced by Peter Stockwell (2002) attempts to relate "the structures of the work of art, including the literary text, to their presumed or observed psychological effects on the recipient, including the reader" (p.1). In this regard, eminent cognitive poetics theorists such as Emmot (2003), Burke

(2003), Steen (2003), Semino (2003), and Hamilton (2002, 2003) perceive a relationship between the human cognition processing and analysis of a literary work. They thus, accepting the importance of readers' beliefs, assumptions and psychic states in bestowing meaning to the words in a text, affirm the active role of reader in meaning making process.

To summarize, the New Criticism as stated in the preceding pages introduces practical criticism, and assigns central position to the text disregarding historical, cultural, and biographical considerations. Feminism, Marxism, New Historicism, and Post Colonialism, on the other hand consider a text as a product of socio-political, cultural, ideological, and biographical conditions, and assign importance to the context. Post-Structuralism or Deconstruction, and Phenomenological theories bring the reader into spotlight and consider him or her as the sole agent to produce meaning of a text.

An overview of the critical theories to interpreting literary texts given in the preceding pages makes it clear that theories regarding what is important to focus on in the act of reading and how to read have been undergoing a series of changes and consequently the methods of teaching and studying literature in a professional academy or institutions have been undergoing transformation.

The modern literary critical theories in particular, Deconstruction, Cognitive Poetics and Reader-Response have contributed in developing the current approaches to teaching literature in academic set ups. In the current approach to teaching literature in academic set ups the responsibility of meaning making has been assigned

to students. Students are encouraged to utilize their knowledge base, connect the text with their personal life and practical world outside the classroom, and generate personal and creative responses. They are not encouraged to treat a text as sacred object and follow the traditional assumptions and interpretations introduced by teachers or other literary critics. Showalter (2004) supporting this approach emphatically states, “teaching literature is not brain surgery. No one will die if we make a mistake about Dryden” (p.ix).

The modern approaches to teaching attempt to develop an interaction between reader and text and encourage students to approach the text from various creative perspectives. (Hirvela, 2004, p.49; Leach, 1992, p.99) It is realized by the scholars in the field as for example Wagner (2005), Knapp (2004), Rosslyn (2005), Bassnett (2005), Showalter (2004), Palmer and Hartog (2005), and Dresang and McClelland (1999) that the teaching of literature which makes the most sense in the context of twenty first century needs to be student-centered and guided by cognitive learning psychology. They recommend discarding the traditional approaches to teaching and studying literature and plead for introducing a modern approach in order to help the students of literature accommodate in the twenty first century – the age of information technology, telecommunication and globalization.

Wagner (2005) taking the changing social values and structures into consideration suggests to teach literature as a tool to teach inquiry and investigation skills and not as a source of knowledge. Similarly Knapp (2004) thinks that in the present age the focus needs to be shifted from what texts mean to what students think about them and how they learn. In addition to this, he also emphasizes on the need of

developing a relationship between institutionalized literary theory and teaching techniques for literature classrooms. His article recommends reader response approach to the studying of literature. Dresang and McClelland's article (1999) emphasizes the need to incorporate the characteristics of today's digital world in the teaching of literature in order to enable the students to learn information processing skills. Rosslyn (2005) accepts that English as a university subject has undergone a change with the advent of the twenty first century. Hence it is the need of the time to accept that "the student does think" (p.321) and to redesign syllabuses according to the needs of the students. Sonjae (n.d., p.1) thinks that the teaching of literature needs to "respond to the radical changes facing us today". In this regard the author suggests that the teaching of literature should prepare the students to think, question the existing standards and communicate their ideas in a creative manner. For Bassnett (2005) students today, take university as a place to qualify for jobs. This situation justifies the need to change the present methods and strategies in order to prepare students for practical life today and tomorrow. In this regard the author emphasizes the need for teaching information processing skills and other such skills in literature classrooms. Similarly Showalter (2004) also emphasizes introducing radical changes in teaching methods and strategies and learning theories in the light of the requirements of the new century. Students for the author need to be taught to learn the ways of reading, thinking, interpreting, annotating and evaluating the texts independently. Palmer and Hartog (2005) think that though the application of literary theory in teaching literature has introduced students with the new approaches to understand a text but not helped them accommodate themselves in competitive economy and get jobs.

Thus Reader Response theory is taken as a useful tool to develop flexibility, spirit of discovery, autonomy and other higher order thinking skills. These skills make study of literature meaningful and useful in today's world. Reader Response theory encourages readers as Brookfield (1987, pp.115-16) thinks to trust in their judgments and reject traditional standards. Reader Response theory is not a monolithic theory but a collection of opinions. The initial seeding of the thought was done by the well known new critics I. A. Richards (1924) and Louise Rosenblatt (1978), and was fostered by a number of critics. Noteworthy among them are Wolfgang Iser (1987), David Bleich (1978), Hans Robert Jauss (1982), and Stanley Fish (1980). All proponents of this theory emphasize reader's active role in the production of meaning of a text. They, in this regard consider the role of a reader as important as that of an author in the creation of a text. For them a text means what each reader thinks of it. A text according to this approach is, as Hirvela (2004, p. 51) thinks, "open to a wide range of interpretations" for a reader who is well versed in the necessary conventions of literary studies.

Thus we see that reader response approach is actually an exercise in creative thinking. The use of reader response approach triggers and supports the cognitive functioning of students, thus, it can be utilize as a tool to develop students' creative thinking. The readers with this method of reading assume the role of explorers, discoverers and creators.

There is a growing volume of research which recommends reader response approach and introduces cognitive teaching strategies, techniques, and activities that promote creative, active, and collaborative learning in literature classroom making

literature life-relevant and personally meaningful to students. In this regard Showalter (2004), Hirvela (2004), Griffith, (1999), Brandt (1999), Hyland (2004), Bazerman (1989 ), Leach ( 1992), Peacock (1990), Egan (2005), Day, Spiegel, McLellan, and Brown (2002)), Davis (1989; 1992), Probst (1994), Dybdahl (1992), Moore (2002), Beach (2000), Johnson (2002), Bean (2001), and Shaffer-koros and Reppy (1999) are noteworthy examples. The strategies recommended by Brandt (pp.1-12), and Griffith (pp.111-119) include substituting characters, comparing and contrasting, using visuals, adding and substituting, placing in new contexts, giving personal responses, and making connections. Similarly Hyland (p.135) recommends strategies, which involve activities of collecting information through research and interview, small group construction of texts, completing unfinished skeletal texts, creating texts using visuals, and creating parallel texts. Egan also recommends similar cognitive strategies and tools. For him Story, Metaphor, Binary Opposites, Rhyme, Rhythm, and Pattern, Jokes and Humor, Mental Imagery, Gossip, Play, Mystery, and Embryonic tools of literacy are effective cognitive tools to develop students' imagination and thinking. Bazerman recommends students to maintain reading journals and write response essays. Day et al provide guidelines, mini-lessons, and checklists to use literature for developing creative problem solving. Beach promoting 'activity theory' emphasizes connecting the practical world of readers with the text: its setting, characters, motifs, conflicts, and issues. Showalter, Dupins and Elliot, Leach, Davis, Probst, Moore, Johnson, Bean, and Shaffer- Koros and Reppy all recommend and suggest activities that emphasize readers' or students' active and creative role in giving response to texts.

Review of literature given above recommends the creative and active role of students in studying literature and supports application of the cognitive strategies to interpret. The present study is an attempt to work within the framework of this approach so as to develop students' creative thinking and thus enable them to be active in generating ideas and processing information, work in collaboration, establish connections between literature and practical world, and be creative problem solvers.

### ***2.7 Review of Related Studies***

The present study attempts to suggest application of cognitive teaching techniques, strategies, and tools in order to develop creative thinking and other higher order thinking skills of the students of literature. Hence, this section reviews the studies conducted to test the significance of cognitive teaching devices, strategies and methods. An enormous volume of research is available on cognitive teaching strategies and methods and the findings support the use of cognitive strategies, which help develop cognition and thinking skills. Nine studies, which are considered for the present review include Blakolo, Afemikhe (2002), Phye (2001), Bulgren et al. (2000), McCrudden, Schraw, and Kambe (2005), Schraw (2000), Simister (2004), Winne and Marx (1982), Schmidt, Goforth, and Drew (1975), and Torff (2003).

Blakolo, Afemikhe and Anthony (2002) conducted an experimental study titled "The Effect of Literature-based Reading on Gifted Students in Botswana" on a sample of 20 students (ten males and ten females) selected from Community Junior School in Gabarana, Botswana. For the researchers creative reading involves gap filling, making connections, critical evaluation, synthesizing and problem solving. The study used the Torrance Test of Creative Thinking (TTCT) to measure fluency,

originality, elaboration and abstractedness and other components of giftedness, and Estates (1974) Scale for the Attitude to Reading. On the basis of the results illustrating significant achievement of students, the study concluded, “literature-based reading improves creativity, attitude and reading skills of the gifted children” (p.4).

Similarly Bulgren et al. (2000) undertook a research project consisting of three studies conducted to investigate “the use of analogies as an instructional tool to teach important, difficult concepts” (p.427). Study1 attempted to determine the effects of instructional routine, which makes use of analogies on students’ knowledge of concepts. A total of 83 students participated in the study who were randomly assigned to experiment condition 1 and condition 2. Study 2 attempted to determine the effects of routine instruction on teachers’ use of analogy-based instructional routine in their classes. Ten Secondary Science and Social Studies teachers participated in the study. Study 3 conducted in classroom setting attempted to determine students’ knowledge of science concepts when they are taught with analogy-based instructional routine or without it. The project was focused on two cognitive teaching devices: “Concept Anchoring Table” and “Concept Anchoring Routine” (p.427). Findings of the studies were:

- i. The use of ‘Concept Anchoring table’ and Concept Anchoring Routine’ enhanced students’ performance. They better understood and remembered secondary subject matter concepts.
- ii. The analogy-based instructional routine produced positive results in real classroom settings as well as in laboratory.

- iii. Teachers could create 'Concept Anchoring table' and Concept Anchoring Routine' in less time and were satisfied with their results.
- iv. The study, thus concluded that teachers needed to be equipped with the teaching devices and methods such as instructional routine with 'Concept Anchoring table' and Concept Anchoring Routine' in order to facilitate students learn complex and difficult concepts and develop higher order cognitive processes.

Schraw (2000) conducted an experimental study titled "Readers' Beliefs and Meaning Construction in Narrative Texts" on 247 students of a large Midwestern university. They were divided into groups of 10 to 25 and given similar instructions. The study attempted to investigate how readers' beliefs affect meaning construction when they are engaged in reading a narrative text, which can have multiple interpretations. The study examined three aspects of reading: understanding the main idea, generating personal responses to the text and making "holistic interpretations" (p.96) of the text. There were two main conclusions of the study. The first was that adult readers with their separate beliefs interpreted the text in different ways. Their "transactional beliefs" (p.103) contributed in making thematic and critical responses, and 'holistic interpretations' of the texts. On the other hand, "transmission beliefs" (p.103) contribute in making critical responses to the text only when they interacted with the transactional beliefs. The second conclusion was that the 'transactional beliefs' facilitated deeper processing which resulted in making thematic and critical responses, and 'holistic interpretations'.

The study conducted by McCrudden, Schraw, and Kambe (2005) was titled “The Effect of Relevance Instruction on Reading Time and Learning”. The study was conducted to explore “the effect of relevance instruction on reading time and learning for relevant and non-relevant text” (p.88). The study comprised two experiments, which were conducted on 83 students. In experiment 1 the researchers made use of a non-narrative text and in experiment 2 of a narrative text. Findings were that the results across both experiments replicated. The results of both experiments show that ‘relevance instructions’ for pre reading phase facilitate recall of the text focused by the instruction. Hence, the study concluded that the ‘relevance instruction’ specifically designed facilitated recall of relevant text. The study also concluded that “the enhancement of learning by relevance instruction [was] not mediated by an increase in effort or interest” (p.98) when ‘relevance instruction’ specifically designed for pre reading phase was provided at pre reading phase.

Winne and Marx (1982) conducted a study titled “ Students’ and Teachers’ Views of Thinking Processes for Classroom Learning” to investigate the cognitive processes which the teachers intended their students to use in response to their instruction, and the cognitive responses students make to teaching instructions and events in a typical classroom. The participants of the study were three male and two female teachers, and 113 students from five schools in two suburban districts near Vancouver, British Columbia. The researchers used videotaping for classroom observations, teachers’ interviews, and students’ interviews to collect the data. The study identified three major categories of cognitive responses intended by the

teaching instruction: “orienting”, “cognitive processing”, and “consolidating” (p.502).

The findings of the study were:

- i. Teachers needed to communicate the relationship between what they taught, how they taught, and how students should think or process in order to help their student have effective learning.
- ii. All teaching events did not directly result into learning.
- iii. The amount of information students had to process cognitively contributed in making instructional stimuli successful.
- iv. Mastery over the contents to be learnt played an effective role in helping students perform cognitive processing intended by the instructional stimuli.
- v. Students seemed to be strategic in making cognitive responses or processing in response to teaching events.

This study attempts to establish a useful link between instructional material and process. Thus it can have a positive impact on developing cognitive teaching models.

The general conclusion of the study was that “students mediate instructional events with their cognitive processing” (p.515) and the teachers needed to be more sensitive about their instructions intended to make students give cognitive responses and make cognitive processing as they desired because different students might interpret them in various other ways.

Schmidt, Goforth, and Drew (1975) conducted an experimental study on 78 second semester undergraduate students of California Public Elementary School. 39 students were randomly assigned to experiment group and 39 to control group. The

experiment group was further divided into groups of 20 and 19. The researchers used two types of creativity tests for the study. One was based on visual cues and the other on verbal cues. The result showed that the achievement of the experiment group was higher than that of the control group. Thus the study concluded with supporting the hypothesis of the research that students engaged in creative dramatics would score higher on creativity test than those who were not engaged. This study in the researcher's opinion can be taken as a useful addition to the research which supports active and discovery learning.

Phye (2001) conducted an experimental study titled "Problem-Solving Instruction and Problem-Solving Transfer: The Correspondence Issue" on 120 students of Introductory Psychology. The participants were randomly assigned to treatment and no treatment control conditions. The primary objective of the study was "to determine the correspondence between learning acquisition performance and problem-solving transfer performance under varying conditions of instruction" (p.573). Findings of the study suggested lack of correspondence between learning acquisition performance and problem-solving transfer performance. The study, thus, concluded that the process of problem-solving reconstructed the knowledge already stored in memory (remembering) and then on the bases of what was remembered it constructed new knowledge as well. The study also concluded that problem-solving was a dynamic process and that proved the shortcoming of the view of memory to the computer metaphor, which regarded memory simply as a process that involved automatic reconstruction of prior knowledge that is knowledge stored in memory.

Thus the study adds to the existing research on human memory and information processing.

Torff (2003) conducted a study titled “Developmental Changes in Teachers’ use of Higher Order Thinking Skills and Content Knowledge” to investigate the hypothesis that “classroom practices change (HOTS increase and content decrease) as teachers develop expertise, but teachers who gain classroom experience and in-service education tend to increase content but fail to increase HOTS as experts do” (p.563). The participants of the study were 60 teachers from different schools in Conneaut, Massachusetts, and New York. The participants were equally divided into three groups: experts, experienced teachers and novices. The researcher observed all the teachers in their classrooms. The findings of the study were that novices preferred curriculum centered approach and emphasized more on using contents than higher order thinking skills in their practices. On the other hand, experts preferred learner-centered approach, used more higher-order thinking skills and moderate contents. Experienced teacher according to the findings used some of the practices used by the experts. Their approach to the content teaching, though, was almost similar to experts, but they emphasized comparatively less on learner- centeredness. It was also discovered that as regards the use of higher order thinking skills, experienced teachers were similar to novices, and thus experts exceeded them.

Simister (2004) conducted a study titled “To Think or not to Think: A Preliminary Investigation into the Effects of Teaching thinking.” The researcher taught twenty five thinking skills lessons to a group of year five students and concluded that lateral and creative thinking could be taught and curiosity for learning

could be developed in children if the teacher made efforts first to teach thinking in a flexible and exam-free context and then integrate it through out the curriculum.

Studies conducted by Torff and Simister point out the significance of learner-centred flexible approach to teaching which provides sufficient space to learners to communicate their opinion, have ability to generate multiple ideas and explore issues from various perspectives.

## CHAPTER 3

### METHODS AND PROCEDURES OF THE STUDY

This chapter reviews the design, methods and procedures used in this study. First it describes the design and then population. Next it discusses the tools used to collect the data. Then it presents the procedures for data collection, and finally it illustrates the statistics used to analyze data.

#### *3.1 Design*

The present study comprises two phases. Phase I is survey and phase II is experimental. First phase i.e. survey, empirically investigated the methods of teaching literature at master's level in Pakistani universities and colleges in order to determine whether these methods are based on cognitive learning psychology and contribute to develop students' creative thinking and other higher-order thinking skills. This phase was descriptive in nature and the data collected were analyzed quantitatively.

The second phase used true experimental pre-test – posttest control group design. The two groups employed for the experiment were called experimental group and control group. True experimental design helps gain the most reliable information on the effectiveness of the given treatment and random assignment of participants to control group and experimental group assures that the groups are comparable and difference observed in learning at the end of the treatment is the result of the given treatment. Pre-test and posttest were conducted on both the groups. This assessment

strategy is very common in educational research because it allows a straightforward assessment of a pedagogical intervention. Pre-test– posttest comparison helped the researcher decide the desired learning outcomes, create the measures to capture them, randomly assign the participants to two groups called control group and experimental group and administer pre-tests, administer pedagogical intervention to the experimental groups and conduct posttests, analyze and compare the results of pre-tests and posttests and observe the difference of the given treatment.

The experiment for the current research was conducted to explore whether the application of cognitive teaching strategies, tools, and techniques through cognitive teaching model work to develop creative thinking and other higher-order thinking skills of students of literature. In pre-test – posttest experimental design the effects of the treatment variable were measured quantitatively.

### ***3.2 Population***

This section is divided into two parts: phase I and phase II:

#### ***Phase I***

The population of phase I comprised:

- i. 900 students of M. A. English literature in the universities and colleges of the Punjab and Islamabad.
- ii. 100 teachers who teach M.A. English literature classes in the universities and colleges of the Punjab and Islamabad.

- iii. 20 chairpersons of the departments of English where M.A. English literature classes are being conducted.

### ***Phase II***

The population of phase II comprised:

- i. 75 students of M.A. English studying Romantic Poetry at International Islamic University, Islamabad.
- ii. 79 students of M. A. English studying Fiction II at International Islamic University, Islamabad.

### **3.3 Sample**

This section is divided into two parts: phase I and phase II:

#### ***Phase I***

Sample for phase I was:

- i. 50% of the total population of students i.e. 450. 'ith' sampling technique was used i.e. every second number in the list of total number of students was included in the sample.
- ii. Total population of teachers i.e. 100 % sampling.
- iii. Total population of chairpersons i.e. 100 % sampling.

#### ***Phase II***

Sample for phase II was:

- i. 68 students of M.A. English second semester studying Romantic Poetry at International Islamic university, Islamabad. 34 students were assigned to experimental group and 34 to control group by even and odd number technique.
- ii. 68 students of M.A. English fourth semester studying Fiction II at International Islamic University, Islamabad. 34 students were assigned to experimental group and 34 to control group by even and odd number technique.

### **3.4 Tools**

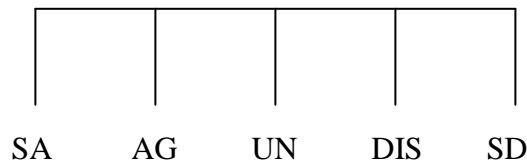
This section is divided into two parts: tools for phase I and tools for phase II:

#### ***Tools for phase I***

- i. Questionnaire containing 16 statements for chairpersons of departments of English. (Appendix A).
- ii. Questionnaire containing 25 statements for the teachers of M.A. English literature classes. (Appendix B).
- iii. Questionnaire containing 25 statements for the students of M.A. English. (Appendix C).

All three questionnaires were developed using Likert five point rating scale by the researcher herself. Likert scale like other rating scales has been developed specifically to address responses to a series of attitudinal dimensions. This scale was used because it allows participants as Tuckham (1999, p.217) says “to register the

extent of their agreement or disagreement with a particular statement of an attitude, belief or judgment.” The scale illustrates five points at equal distance as given below:



Five point rating scale, unlike a four point scale which is considered a forced-choice scale, does not restrict respondents to follow the categories of agreement or disagreement as it allows them to remain neutral if they cannot decide or do not want to agree or disagree.

The questionnaires were then approved by the supervisor. The questionnaire for students was tried out on 20 students, for teachers on 10 teachers, and for chairpersons on 3 chairpersons.

All three questionnaires were designed to investigate method of teaching literature currently employed in Pakistani universities and colleges at post-graduate level. Initially questionnaires were designed only for teachers and students. It was felt that if the opinions of the teachers and students were supplemented with the opinion of the chairperson or head of the department, the findings would be authenticated. This led to the preparation of a third questionnaire for heads and chairpersons. Furthermore, the piloting of the questionnaire brought to light the problem of length and repetition. Consequently the number of questions was reduced which also helped to eliminate redundancy.

### *Tools for phase II*

- i. Four achievement tests:
  - a. A pre-test of 100 marks for the experimental and control group of Romantic Poetry (Appendix D).
  - b. A pre-test of 100 marks for the experimental and control group of Fiction II (Appendix E).
  - c. A post-test of 100 marks for the experimental and control group of Romantic Poetry (Appendix D).
  - d. A post-test of 100 marks for the experimental and control group of Fiction II (Appendix E).

The pre-tests and posttests were prepared by the researcher. They were subject-based and were prepared to measure creative thinking and other higher-order thinking skills of the students of English literature at Master's level. They covered basic components of creative thinking and other higher-order thinking skills such as Creative Problem Solving, Creative Checklists, Advance Organizer, Attribute Listing, the Reversal Method, Visualization, Rearrangement, Transference, Whole Brain Thinking, and Discussion Web. Three guiding principles were taken into account in preparing the pre-tests and posttests: first, they should have a sound theoretical base akin to the theoretical base, assumptions, and objectives of the study; second, they should include a range of creative thinking and other higher-order thinking skills operations appropriate to the students of Master's level; and third, to facilitate the measurement of creative thinking and other higher-order thinking skills of each participant objectively and reliably.

The tests were discussed with the supervisor and other professors teaching English literature and educational psychology and piloted on 50 students. The piloting of the pre-test helped to determine the content and duration of the test. Initially the test was based on a text from Romantic poetry, an area with which the students were not yet familiar. In the absence of background knowledge and the unusual format of the texts students' comprehension and interest was impeded. This led to a revision of the content and subsequently the pre-test was based on a classical poem which the students had read in their previous semester. Furthermore, the duration of the test was also revised from the usual three hours given for examination to four hours keeping in view the format and the nature of the test which required original personal response from the students as opposed to the stereotypical responses. When the revised pre-test was administered to the students' familiarity of content helped to put them at ease and assisted them in overcoming their hesitation in responding to the new and different testing format. This also guided the designing of the posttest.

After validation, they were administered on the samples of the study.

- ii. Lesson plans for the experimental groups of Romantic Poetry and Fiction II (Modern Fiction) (Appendix F and G).
- iii. Worksheets for the experimental group of Romantic Poetry and Fiction II (Modern Fiction) (Appendix F and G).
- iv. The prescribed text i.e. *The Prelude* Book I for the experimental and control group of Romantic Poetry.

- v. The prescribed text i.e. *Heart of Darkness* for the experimental and control group of Fiction II.

Lesson plans and worksheets were prepared by the researcher to teach the experimental group while the control group was taught according to the traditional lecture method. Creative thinking tools, strategies, and techniques were incorporated in the worksheets prepared for the experimental groups.

### **3.5 Administration**

This section is divided into two parts: phase I and phase II:

#### ***Phase I***

All three questionnaires were distributed and collected personally by the researcher. It not only facilitated the respondents but also helped the researcher to collect data according to schedule. The data were then tabulated and analyzed statistically, and presented in table form.

#### ***Phase II***

##### **Pre-tests**

The pre-tests were carefully prepared and comprised tools and techniques for developing creative thinking. The pre-test for Romantic Poetry was administered to the experimental and control group of Romantic Poetry and the pre-test for Fiction II was administered to the experimental and control group of Fiction II before the treatment was started. Tests for Romantic Poetry and Fiction II were divided into three parts and administered in two days with each session of three hours for the

convenience of the participants. The purpose of the tests was to obtain the initial achievement level of students in terms of development of creative thinking and other higher-order thinking skills so that it could be used to measure the difference of achievement at the end of the treatment. The pre-test thus was a useful tool for achieving the internal validity of experimental research. The tests were conducted in a quiet examination hall in a pleasant and informal atmosphere. Similar conditions i.e. time, place, and environment for the experimental and control groups of both Romantic Poetry and Fiction II were ensured.

Tests were administered and scored by the researcher and counter checked by the teachers teaching the same courses.

### **Treatment**

Sixty eight students for M.A. English 2<sup>nd</sup> Semester studying Romantic Poetry and sixty eight students of 4<sup>th</sup> semester studying Fiction II (Modern Fiction) were selected for the experiment. Romantic Poetry and Modern Fiction are included in M.A. English literature programmes offered by all the universities in the Punjab and Islamabad. 34 students of Romantic Poetry and 34 of Fiction II were assigned randomly to two experimental groups. 34 students of Romantic Poetry and 34 of Fiction II were randomly assigned to two control groups. After this initial preparation of forming the required groups, and the administration of pre-tests, treatment was carried out for a period of two months.

Keeping in view the theoretical assumptions, earlier research findings, particularly those focused on developing creative thinking, and other high-order thinking skills, a variety of teaching learning situations and activities were devised.

The creative thinking tools and techniques such as the Plus, Minus, and Interesting (the PMI), and Provocative Operation (PO), Whole Brain Thinking, Creative Problem Solving, Fraction, The Reversal Method, Attribute Listing, Creative Ideas Checklist, and Making Connection etc. were used to prepare teaching activities and situations for the experimental groups of Romantic Poetry and Fiction II. Learning situations were organized into 24 sessions. Each session was of 1 hour. Lesson plans were prepared for each of the teaching session. (Appendix F and G)

The lesson plans defined the objectives for developing creative thinking, specific objectives related to the study material for the specific session, the tasks to be learned and performed. They also listed the material to be used, outlined the procedures to be followed, included follow up activity for extending learning, and identified the selected teaching strategies and techniques. In each lesson plan activities were classified and arranged in a graded order from less difficult to more difficult. The lesson plans were conducted with the help of worksheets. (Appendix F and G)

The researcher in consultation with the supervisor developed schedule of the treatment. It was considered important to maintain an atmosphere of collaboration, cooperation and flexibility, and student-centered setting in each teaching/learning session arranged for the experimental groups.

On the other hand the control groups for Romantic Poetry and Fiction II were not given the treatment according to the proposed teaching strategies and techniques. They were given standard routine treatment. A total of twenty four teaching sessions were conducted during a period of two months for the groups of Romantic Poetry

and Fiction II. The researcher did not prepare any lesson plans for these groups. They were taught with lecture method. The lectures focused on the standard routine activities and topics.

### **Posttests**

The posttests for Romantic Poetry and Fiction II carefully designed in consultation with the supervisor were prepared to measure the development of creative thinking and other higher-order thinking skills. The test for Romantic Poetry was conducted on the experimental group and control group of Romantic Poetry and the test for Fiction II was administered on the experimental and control group of Fiction II at the end of the treatment period i.e. two months. Both the tests were conducted in two days with each session of two hours in a quiet examination hall. Similar conditions i.e. time, place, and atmosphere were ensured for both the experimental groups and control groups.

## **3.6 Data Analysis**

This section was divided into two parts: phase I and phase II:

### ***Phase I***

The data collected through the questionnaires were tabulated and analyzed by using the mean score formula:

$$\text{Mean score} = \frac{f_{SA}^{x5} + f_A^{x4} + f_{UNC}^{x3} + f_{DA}^{x2} + f_{SDA}^{x1}}{N}$$

Analysis was made for every statement in three questionnaires and presented in table form. Mean score 3 and above was considered as favorable to the statements.

### ***Phase II***

The data collected through pretests and posttests were analyzed using Z test. The data were analyzed on the level of .01 and 0.5 for significance. Detail of data analysis is presented in Appendix H.

Findings were discussed and recommendations were made on the basis of analysis of data collected.

## CHAPTER 4

### PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the presentation and analysis of data. It is divided into two parts: part I deals with presentation and analysis of phase I data, while part II deals with presentation and analysis of phase II data.

#### *4.1 Part 1: Presentation and Analysis of Phase I Data*

In phase I of the study i.e. survey, three questionnaires were designed: one for the chairpersons of the English departments (Appendix A), one for the teachers teaching master's of English literature classes (Appendix B), and one for the students of master's of English literature (Appendix C). The questionnaires were designed to collect empirical data about the present methods of teaching literature at Masters' level in Pakistani universities and in post graduate colleges. The data were analyzed on average and mean score in order to find out the central tendency of response of the participants. Presentation and analysis of data is given below:

### *Data Analysis of Questionnaire for Chairpersons*

Table 1

*Opinion about Delivery of Comprehensive Lectures*

S.No	Statement	Level	Frequency	Percentage	Mean Score
1.	Comprehensive lectures are delivered in the class	SA	10	50	4.15
		A	5	25	
		UNC	3	15	
		DA	2	10	
		SDA	0	0	

Table 1 reflects that 75% respondents agreed with the statement. 15% were uncertain in their responses, while 10% of the respondents disagreed. The mean score is 4.15.

Table 2

*Opinion about Introducing Interpretations of Critics*

S.No	Statement	Level	Frequency	Percentage	Mean Score
2.	The interpretations of critics are provided to the students	SA	8	40	4.2
		A	8	40	
		UNC	4	20	
		DA	0	0	
		SDA	0	0	

Table 2 reveals that 80% chairpersons agreed with the statement, 20% remained uncertain and 0% disagreed. The mean score is 4.2.

Table 3

*Opinion about Imparting all Relevant Information in the Class*

S.No	Statement	Level	Frequency	Percentage	Mean Score
3.	All relevant information is imparted in the class by teachers	SA	7	35	4.1
		A	10	50	
		UNC	1	5	
		DA	2	10	
		SDA	0	0	

Table 3 indicates that 85% respondents agreed that teachers impart all relevant information in the class, 5% of them were uncertain, while only 10% disagreed with the statement. The mean score is 4.1.

Table 4

*Opinion about Completion of all Prescribed Syllabus*

S.No	Statement	Level	Frequency	Percentage	Mean Score
4.	All prescribed syllabus is covered in the class	SA	9	47.36	4.10
		A	5	26.31	
		UNC	3	15.8	
		DA	2	10.52	
		SDA	0	0	

Table 4 indicates that 73.67% respondents agreed that teachers cover the entire prescribed syllabus in the class, 15.8% remained uncertain, while only 10.52% disagreed with the statement. The mean score is 4.10.

Table 5

*Opinion about Taking down Notes of Lectures by Students*

S.No	Statement	Level	Frequency	Percentage	Mean Score
5.	Teacher's lectures are noted down in detail	SA	4	21.05	3.15
		A	4	21.05	
		UNC	5	26.31	
		DA	3	15.78	
		SDA	3	15.78	

Table 5 reflects that 42.1% respondent samples agreed that teachers want their students to take detailed notes of class lectures. 26.31% of them were uncertain in their responses, while 31.56% of them disagreed. The mean score is 3.15.

Table 6

*Opinion about Relating Teaching of Literature with the Practical World*

S.No	Statement	Level	Frequency	Percentage	Mean Score
6.	The issues of the practical world are related with teaching of literature	SA	1	5	2.42
		A	3	15.78	
		UNC	4	21.05	
		DA	6	31.57	
		SDA	5	26.31	

Table 6 reveals that 20.78% respondents agreed that teaching of literature is related with the practical world. 21.05% remained uncertain and 57.88% disagreed. The mean score is 2.42.

Table 7

*Opinion about Encouraging Students to do Assignments on Topics not Related to Exams*

S.No	Statement	Level	Frequency	Percentage	Mean Score
7.	Students are encouraged to do assignments on topics other than the ones related to examination	SA	0	0	2.3
		A	2	10	
		UNC	6	30	
		DA	8	40	
		SDA	4	20	

Table 7 reveals that 10% respondents agreed that students are encouraged by teachers to do assignments on topics not related to exams, 30% were uncertain and 60% disagreed. The mean score is 2.3.

Table 8

*Opinion about Using Visuals to Assist Teaching*

S.No	Statement	Level	Frequency	Percentage	Mean Score
8.	Visual aids are used to assist teaching	SA	0	0	2.2
		A	2	10	
		UNC	5	25	
		DA	8	40	
		SDA	5	25	

Table 8 indicates that only 10% respondent agreed that teachers use visual aids in their teaching. 25% were uncertain, while 65% disagreed. The mean score is 2.2.

Table 9

*Opinion about Teaching Students Skills to Organize Material and Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
9.	Students are taught the skills to organize material and information	SA	2	10	2.5
		A	2	10	
		UNC	5	25	
		DA	6	30	
		SDA	5	25	

Table 9 reflects that 20% respondent sample agreed that students are taught the skills to organize material and information. 25% remained uncertain while 55% disagreed with the statement. The mean score is 2.5.

Table 10

*Opinion about Arranging Discussions, Brain Storming Sessions, and Seminars*

S.No	Statement	Level	Frequency	Percentage	Mean Score
10.	Discussions, brain storming sessions, and seminars are arranged in the class	SA	1	5	2.4
		A	3	15	
		UNC	4	20	
		DA	7	35	
		SDA	5	25	

Table 10 indicates that 20% of the sample agreed with the statement. 20% were uncertain in their responses while 60% disagreed. The mean score is 2.4.

Table 11

*Opinion about Encouraging Collaboration and Cooperation among Students*

S.No	Statement	Level	Frequency	Percentage	Mean Score
11.	Collaboration and cooperation among students is encouraged	SA	2	10	2.55
		A	3	15	
		UNC	4	20	
		DA	6	30	
		SDA	5	25	

Table 11 indicates that 25% respondents agreed with the statement, 20% were uncertain in their responses, while 55% disagreed. The mean score is 2.55.

Table 12

*Opinion about Encouraging Students to Engage in Innovative Activities such as Dramatizing Poems and Short Stories*

S.No	Statement	Level	Frequency	Percentage	Mean Score
12.	Students are engaged in innovative activities such as dramatizing poems and short stories	SA	0	0	2.4
		A	4	20	
		UNC	5	25	
		DA	6	30	
		SDA	5	25	

Table 12 reflects that 20% respondents agreed that teachers engage students in creative activities such as dramatization of literary texts, 25% respondents remained uncertain, while 55% of them disagreed. The mean score is 2.4.

Table 13

*Opinion about Encouraging Students to Generate Personal Responses to the Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
13.	Students' personal responses to the text are appreciated	SA	1	5	2.4
		A	3	15	
		UNC	4	20	
		DA	7	35	
		SDA	5	25	

Table 13 reflects that 20% respondents agreed that students are encouraged to generate personal responses to a literary text. 24% respondents remained uncertain, while 60% of them disagreed. The mean score is 2.4.

Table 14

*Opinion about Emphasizing Form and Contents of the Text*

S.No	Statement	Level	Frequency	Percentage	Mean Score
14.	The contents and the form of a text are emphasized by teachers	SA	5	25	4.05
		A	11	55	
		UNC	4	20	
		DA	0	0	
		SDA	0	0	

Table 14 reveals that 80% respondents agreed that teachers emphasize both the form and contents of a text, 20% were uncertain in their responses, while 0 % disagreed. The mean score is 4.05.

Table 15

*Opinion about Providing Guidance to Students to Locate and Process Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
15.	Students are provided	SA	1	5	2.35
	guidance by the	A	2	10	
	teachers to locate and	UNC	5	25	
	process relevant	DA	7	35	
	information	SDA	5	25	

Table 15 reveals that 15% respondents agreed that students are provided guidance by their teachers to locate and process information. 25% remained uncertain, while 60% disagreed. The mean score is 2.35.

Table 16

*Opinion about Encouraging Electronic Communication among Students and Teachers*

S.No	Statement	Level	Frequency	Percentage	Mean Score
16.	The use of electronic	SA	2	10	2.5
	communication	A	2	10	
	among teachers and	UNC	5	25	
	students is	DA	6	30	
	encouraged	SDA	5	25	

Table 16 reflects that 20% of the respondent sample agreed that electronic communication among students and teachers is encouraged. 25% remained uncertain while 55% disagreed with the statement. The mean score is 2.5.

*Analysis of Data of Questionnaire for Teachers*

Table 17

*Opinion about Teaching Literature as a Source of Aesthetic Pleasure*

S.No	Statement	Level	Frequency	Percentage	Mean Score
1.	Literature is taught as source of aesthetic pleasure	SA	38	38	4.16
		A	44	44	
		UNC	14	14	
		DA	4	4	
		SDA	0	0	

Table 17 reflects that 82% respondents agreed with the statement that literature is taught as source of aesthetic pleasure, 14% of them were uncertain in their responses, while only 4% of them disagreed the statement. The mean score is 4.16.

Table18

*Opinion about Teaching Literature as a Source of Moral Instruction*

S.No	Statement	Level	Frequency	Percentage	Mean Score
2.	Literature is taught as source of moral instruction	SA	13	13.13	3.16
		A	33	33.33	
		UNC	32	32.32	
		DA	14	14.14	
		SDA	7	7.07	

Table 18 reflects that 46.46% teachers agreed that they taught literature as a source of moral instruction, 32.32% of them remained uncertain, while 21.21% disagreed with the statement. The mean score is 3.16.

Table 19

*Opinion about Teaching Literature as a Tool to Acquire Skills to Solve Problems*

S.No	Statement	Level	Frequency	Percentage	Mean Score
3.	Literature is taught	SA	3	3.03	2.29
	as tool to learn	A	12	12.12	
	problem solving	UNC	23	23.23	
	skills	DA	34	34.34	
		SDA	27	27.27	

Table 19 indicates that 15.15% respondent samples agreed that literature at post graduate level is used as a tool to learn problem solving skills, 23.23% of them remained uncertain, while 61.61% disagreed. The mean score is 2.29.

Table 20

*Opinion about Facilitating Students to Focus on the Use of Language in the Text*

S.No	Statement	Level	Frequency	Percentage	Mean Score
4.	Students are	SA	42	42	4.22
	facilitated to focus	A	40	40	
	on the use of	UNC	16	16	
	language in the text	DA	2	2	
		SDA	0	0	

Table 20 reflects that 82% respondents agreed that teachers help the students focus on the use of language in the text, 16% respondents were uncertain, while 2% disagreed with the statement. The mean score is 4.22.

Table 21

*Opinion about Students' Reliance on Interpretations of Well Know Critics*

S.No	Statement	Level	Frequency	Percentage	Mean Score
5.	Students are made to rely on interpretations of critics	SA	35	35.71	4.07
		A	40	40.81	
		UNC	18	18.36	
		DA	5	5.10	
		SDA	0	0	

Table 21 reveals that 76.52% teachers agreed teaching methodology at post graduate level in Pakistan encouraged students' to rely on the interpretations of well known critics. 18.36% of those questioned remained uncertain in their response, while 5.10% of them disagreed with the statement. The mean score is 4.07.

Table 22

*Opinion about Generating Unusual and Novel Interpretations of Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
6.	Students are encouraged to generate novel and creative interpretations of texts	SA	8	8.08	2.69
		A	13	13.13	
		UNC	30	30.30	
		DA	37	37.37	
		SDA	11	11.11	

Table 22 indicates that 21.21% respondents agreed that students are encouraged to generate novel and unusual interpretations. 30.30% of them were uncertain, while 48.48% disagreed with the statement. The mean score is 2.69.

Table 23

*Opinion about Completing all Prescribed Syllabus*

S.No	Statement	Level	Frequency	Percentage	Mean Score
7.	All prescribed syllabus is covered in the class	SA	45	45.91	4.28
		A	39	39.79	
		UNC	11	11.22	
		DA	3	3.06	
		SDA	0	0	

Table 23 reveals that 85.7% respondents agreed that the teachers give priority to the completion of the prescribed syllabus in the class, 11.22% were uncertain where as, 3.06% of them disagreed with the statement. The mean score is 4.28.

Table 24

*Opinion about Students' Dependence on Key Books and Notes*

S.No	Statement	Level	Frequency	Percentage	Mean Score
8.	Key books and notes are relied on by the learners	SA	38	38.77	4.08
		A	42	42.85	
		UNC	9	9.18	
		DA	6	6.12	
		SDA	3	3.06	

Table 24 reflects that 81.62% respondent sample agreed that students rely on key books and notes, whereas 9.18% were uncertain. 9.18% however, disagreed. The mean score is 4.08.

Table 25

*Opinion about Relating Teaching of Literature with the Practical World*

S.No	Statement	Level	Frequency	Percentage	Mean Score
9.	Teaching of literature is related with the practical world	SA	10	10.30	2.59
		A	12	12.37	
		UNC	24	24.74	
		DA	31	31.95	
		SDA	20	20.61	

Table 25 indicates that 22.67% teachers agreed that teaching of literature is related with the issues of the practical world. 24.75% of the respondents were uncertain, while 52.56% disagreed with the statement. The mean score is 2.59.

Table 26

*Opinion about Teaching Techniques to Organize Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
10.	Students are taught techniques to organize material and information	SA	8	8.08	2.49
		A	11	11.11	
		UNC	27	27.27	
		DA	29	29.29	
		SDA	24	24.24	

Table 26 reveals that 19.19% respondents agreed that students are taught techniques to organize material and information, 27.27% remained uncertain, while 53.53% of the respondents disagreed. The mean score is 2.49.

Table 27

*Opinion about Assigning Assignments on Topics not Related to Exams*

S.No	Statement	Level	Frequency	Percentage	Mean Score
11.	Students are encouraged to do assignments on topics other than the ones related to exams	SA	10	10.20	2.71
		A	13	13.26	
		UNC	30	30.61	
		DA	29	29.59	
		SDA	16	16.32	

Table 27 reflects that 23.46% respondent samples agreed with the statement. 30.61% were uncertain in their responses, while 45.91% of the respondents disagreed. The mean score is 2.71.

Table 28

*Opinion about Encouraging Students to Work on Projects and Presentations*

S.No	Statement	Level	Frequency	Percentage	Mean Score
12.	Students are encouraged to work on projects and presentations	SA	8	8.08	2.58
		A	12	12.12	
		UNC	29	29.29	
		DA	31	31.31	
		SDA	19	19.19	

Table 28 indicates that 20.20% teachers agreed that students are encouraged to work on projects and presentations, 29.29% remained uncertain, while 50.50% disagreed with the statement. The mean score is 2.85.

Table 29

*Opinion about Relating Literary Texts to Students' Personal Life and Experiences*

S.No	Statement	Level	Frequency	Percentage	Mean Score
13.	Literary texts are related with students' personal life and experiences	SA	11	11.11	2.66
		A	13	13.13	
		UNC	28	28.28	
		DA	26	26.26	
		SDA	21	21.21	

Table 29 reveals that 24.24% of the respondents agreed that literary texts are related with students' personal life and experiences. 28.28% were uncertain, while 47.47% of the respondents disagreed. The mean score is 2.66.

Table 30

*Opinion about Relating Literature with other Disciplines*

S.No	Statement	Level	Frequency	Percentage	Mean Score
14.	Literature is related with other disciplines	SA	8	8.08	2.37
		A	12	12.12	
		UNC	21	21.21	
		DA	26	26.26	
		SDA	32	32.32	

Table 30 reflects that 20.20% respondents agreed that the present teaching methodology relates literature with other subject areas. 21.21% of those surveyed were uncertain in their responses, 58.58%, however, disagreed with the statement. The mean score is 2.37.

Table 31

*Opinion about Presenting Issues in Literary Texts as Problems for Students to Solve*

S.No	Statement	Level	Frequency	Percentage	Mean Score
15.	Issues in literary	SA	7	7.07	
	texts are presented	A	10	10.10	
	as problems for	UNC	28	28.28	2.50
	students to solve	DA	35	35.35	
		SDA	19	19.19	

Table 31 indicates that 17.17% teachers agreed that the issues in literary texts are presented as problems for students to solve. 28.28% remained uncertain and 54.54% disagreed. The mean score is 2.50.

Table 32

*Opinion about Facilitating Students Work in Groups and Pairs*

S.No	Statement	Level	Frequency	Percentage	Mean Score
16.	Students are	SA	8	8.16	
	facilitated to work	A	11	11.22	
	in groups and pairs	UNC	22	22.44	2.38
		DA	29	29.59	
		SDA	26	26.53	

Table 32 reveals that 19.38% respondents agreed that teachers encourage students to work in groups and pairs. 22.44% were uncertain, while 56.12% disagreed. The mean score is 2.38.

Table 33

*Opinion about Conducting Discussions and Brain Storming Sessions in the Class*

S.No	Statement	Level	Frequency	Percentage	Mean Score
17.	Discussions and brainstorming sessions are arranged in the class	SA	9	9.09	2.46
		A	12	12.12	
		UNC	21	21.21	
		DA	31	31.31	
		SDA	26	26.26	

Table 33 reflects that 21.21% of respondent sample agreed that teachers arrange discussion and brain storming sessions in the class. 21.21% were uncertain in their responses, while 57.57% of respondents disagreed. The mean score is 2.46.

Table 34

*Opinion about Encouraging Students to be Flexible in their Interpretations of Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
18.	Students are encouraged to make multiple interpretation of a literary text	SA	10	10.30	2.41
		A	10	10.30	
		UNC	18	18.55	
		DA	31	31.95	
		SDA	28	28.86	

Table 34 indicates that 20.60 % teachers agreed that students are encouraged to be flexible in generating multiple interpretations of literary texts. 18.55% remained uncertain, while 60.81% disagreed. The mean score is 2.41.

Table 35

*Opinion about Asking Intellectually Stimulating Questions*

S.No	Statement	Level	Frequency	Percentage	Mean Score
19.	Students are asked questions that encourage them to investigate and infer	SA	9	9.18	2.60
		A	16	16.32	
		UNC	21	21.42	
		DA	29	29.59	
		SDA	25	25.51	

Table 35 reveals that 25.50% respondents agreed that teachers ask questions that encourage students to investigate and infer. 21.42% were uncertain while 55.10% of the respondents disagreed. The mean score is 2.60.

Table 36

*Opinion about Comparative Analysis in Terms of Similarities and Differences*

S.No	Statement	Level	Frequency	Percentage	Mean Score
20.	Students are motivated to locate similarities and differences between different texts	SA	7	7.14	2.43
		A	10	10.20	
		UNC	26	26.53	
		DA	31	31.63	
		SDA	24	24.48	

Table 36 indicates that 17.34% teachers agreed that students are motivated to locate similarities and differences between different texts. 26.53% remained uncertain and 56.11% disagreed. The mean score is 2.43.

Table 37

*Opinion about Encouraging Students to Predict Theme of Text*

S.No	Statement	Level	Frequency	Percentage	Mean Score
21.	Students are motivated	SA	7	7.07	
	to predict the theme of a	A	8	8.08	
	poem or novel before the	UNC	23	23.23	2.36
	teacher gives a lecture	DA	37	37.37	
	on it	SDA	24	24.24	

Table 37 reveals that 15.15% respondents agreed that teachers motivate students to predict the theme of a poem or play before they give a lecture on it. 23.23% were uncertain while 61.61% respondents disagreed. The mean score is 2.36

Table 38

*Opinion about Content Centered Approach to the Teaching of Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
22.	More importance is	SA	37	37.37	
	assigned to teaching	A	44	44.44	
	the content of the	UNC	11	11.11	4.10
	text	DA	4	4.04	
		SDA	3	3.03	

Table 38 reflects that 81.81% respondents agreed that more importance is attached to teaching the content of the text. 11.11% were uncertain in their responses while 7.07% disagreed. The mean score is 4.10.

Table 39

*Opinion about Teaching Approach Emphasizing the Content and Form of a Text*

S.No	Statement	Level	Frequency	Percentage	Mean Score
23.	The contents and the form of a text are emphasized	SA	39	39.39	4.20
		A	41	41.41	
		UNC	19	19.19	
		DA	0	0	
		SDA	0	0	

Table 39 indicates that 80.08% teachers agreed that the content and form are emphasized in the teaching of a text. 19.19% remained uncertain and 0% disagreed.

The mean score is 4.20.

Table 40

*Opinion about Using Visual Aids*

S.No	Statement	Level	Frequency	Percentage	Mean Score
24	Teaching is assisted with visual aids	SA	7	7	2.36
		A	11	11	
		UNC	24	24	
		DA	27	27	
		SDA	31	31	

Table 40 reveals that 18% respondents agreed that teaching of literature is assisted with visual aids. 24% were uncertain, while 58% disagreed. The mean score is 2.36.

Table 41

*Opinion about Encouraging the Use of Internet to Find Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
25	Students are encouraged	SA	6	6.12	
	to use internet to find	A	9	9.18	
	information	UNC	24	24.48	2.24
		DA	27	27.55	
		SDA	32	32.65	

Table 41 indicates that 15.30% respondents agreed that students are encouraged to use internet to find information. 24.48 remained uncertain, while 60.20% disagreed. The mean score is 2.24.

*Analysis of Data of Questionnaire for Students*

Table 42

*Opinion about Students' Reliance on the Interpretations on Critics*

S.No	Statement	Level	Frequency	Percentage	Mean Score
1.	Students rely on the interpretations of critics	SA	172	39.0	4.03
		A	148	33.56	
		UNC	90	20.40	
		DA	25	5.66	
		SDA	6	1.36	

Table 42 reflects that 72.56% respondent sample agreed that students rely on the interpretations of well known critics to understand a text. 20.40% were uncertain in their responses and 7.02% respondents disagreed. The mean score is 4.03.

Table 43

*Opinion about Encouraging Students to Disagree with the Interpretations of Critics*

S.No	Statement	Level	Frequency	Percentage	Mean Score
2.	Students are encouraged to disagree with the interpretations of critics	SA	20	4.46	2.12
		A	38	8.48	
		UNC	84	18.75	
		DA	142	31.69	
		SDA	164	36.60	

Table 43 reveals that 12.94% respondents agreed that students are encouraged to disagree with the interpretations of critics in order to think independently. 18.75% were uncertain, while 68.29% respondents disagreed. The mean score is 2.12.

Table 44

<i>Opinion about Encouraging Students to Generate Novel and Unusual Interpretations</i>					
S.No	Statement	Level	Frequency	Percentage	Mean Score
3.	Students are encouraged to generate novel and creative interpretations of texts	SA	14	3.13	2.25
		A	49	10.96	
		UNC	113	25.27	
		DA	132	29.53	
		SDA	139	31.09	

Table 44 indicates that 14.09% students agreed that they are encouraged to generate novel and unusual interpretations of texts. 25.27% remained uncertain, while 60.62% disagreed. The mean score is 2.25.

Table 45

<i>Opinion about Students' Understanding of Materials and Concepts</i>					
S.No	Statement	Level	Frequency	Percentage	Mean Score
4.	Students adequately understand materials and concepts presented to them in the class	SA	85	19.01	3.02
		A	89	19.91	
		UNC	92	20.58	
		DA	114	25.50	
		SDA	67	14.98	

Table 45 reflects that 38.92% respondent sample agreed that students understand the materials and concepts presented in the class. 20.58% were uncertain in their responses, while 40.48% respondents disagreed. The mean score is 3.02.

Table 46

*Opinion about Encouraging Students to Think*

S.No	Statement	Level	Frequency	Percentage	Mean Score
5.	Students are motivated to think on whatever is imparted to them	SA	32	7.32	2.78
		A	87	19.90	
		UNC	136	31.12	
		DA	120	27.45	
		SDA	62	14.18	

Table 46 indicates that 27.22% students agreed that they think on whatever is imparted to them. 31.12 % remained uncertain and 41.63% disagreed. The mean score is 2.78.

Table 47

*Opinion about Providing Guidance to Locate and Process Sources of Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
6.	Students are facilitated to locate and process relevant information from the available resources	SA	14	3.13	2.27
		A	49	10.98	
		UNC	116	26.01	
		DA	132	29.59	
		SDA	135	30.26	

Table 47 reveals that 14.11% respondents agreed that teachers help students locate and process relevant sources of information. 26.01% were uncertain while 59.85% respondents disagreed. The mean score is 2.27

Table 48

*Opinion about Encouraging the Use of Internet*

S.No	Statement	Level	Frequency	Percentage	Mean Score
7.	Students are encouraged to use internet to find information	SA	22	4.89	2.20
		A	46	10.24	
		UNC	90	20.04	
		DA	131	29.17	
		SDA	160	35.63	

Table 48 reflects that 15.13% respondent sample agreed that students are encouraged to use the web. 20.04% were uncertain in their responses while 64.80% of the respondents disagreed. The mean score is 2.20.

Table 49

*Opinion about Relating Literature with the Practical World*

S.No	Statement	Level	Frequency	Percentage	Mean Score
8.	Literary texts are related with the issues and problems of practical world	SA	37	8.33	2.33
		A	44	9.90	
		UNC	99	22.29	
		DA	113	25.45	
		SDA	151	34.01	

Table 49 indicates that 18.23% students agreed that literary texts are related to the issues and problems of the practical world. 22.29% of them remained uncertain and 59.46% disagreed. The mean score is 2.33.

Table 50

*Opinion about Teaching Techniques to Organize Material and Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
9.	Students are taught techniques to organize material and information	SA	16	3.60	2.21
		A	44	9.90	
		UNC	112	25.22	
		DA	120	27.02	
		SDA	152	34.23	

Table 50 reveals that 13.5% respondents agreed that teachers help students to learn the techniques to organize material and information. 25.22% were uncertain while 61.25% respondents disagreed. The mean score is 2.21.

Table 51

*Opinion about Assigning Project Works and Research Assignments to Students*

S.No	Statement	Level	Frequency	Percentage	Mean Score
10.	Students are assigned project works and research assignments	SA	29	6.47	2.35
		A	44	9.82	
		UNC	110	24.55	
		DA	122	27.23	
		SDA	158	35.26	

Table 51 indicates that 16.29% respondents agreed that teachers assign project works to students. 24.55% were uncertain in their responses, while 62.49% disagreed. The mean score is 2.35.

Table 52

*Opinion about Organizing Class Room Seminars and Students' Presentations*

S.No	Statement	Level	Frequency	Percentage	Mean Score
11.	Classroom seminars and students' presentations are organized	SA	24	5.38	2.30
		A	47	10.53	
		UNC	114	25.56	
		DA	115	25.78	
		SDA	146	32.73	

Table 52 reflects that 15.91% respondents agreed that teachers organize class room seminars and students' presentations. 25.56% remained uncertain in their responses, while 58.51% respondents disagreed. The mean score is 2.30.

Table 53

*Opinion about the Use of Visual Aids by Teachers in the Classroom*

S.No	Statement	Level	Frequency	Percentage	Mean Score
12.	Videos, documentaries & other visuals are used to teach concepts and texts	SA	14	3.11	1.94
		A	46	10.24	
		UNC	69	15.36	
		DA	91	20.26	
		SDA	229	51.00	

Table 53 reveals that 13.35% respondents agreed that teachers of post graduate level in Pakistan use videos, documentaries and other visuals to assist teaching. 15.36% remained uncertain, while 71.26% respondents disagreed. The mean score is 1.94.

Table 54

*Opinion about Relating Literature with Students' Personal Life and Experiences*

S.No	Statement	Level	Frequency	Percentage	Mean Score
13.	Literary texts are related with students' personal life and experiences	SA	32	7.12	2.29
		A	52	11.58	
		UNC	87	19.37	
		DA	125	27.83	
		SDA	153	34.07	

Table 54 indicates that 18.7% respondents agreed that teachers relate the literary texts with students' personal life and experiences. 19.37% of those asked were uncertain in their responses and 61.9% disagreed. The mean score is 2.29.

Table 55

*Opinion about Assisting Teaching of Literature with Audio-Visual Aids*

S.No	Statement	Level	Frequency	Percentage	Mean Score
14.	Teaching of literature is assisted with audio-visual aids	SA	31	6.98	2.16
		A	42	9.45	
		UNC	66	14.86	
		DA	133	29.95	
		SDA	172	38.73	

Table 55 reflects that 16.43% respondents agreed that teachers of post graduate level in Pakistan use videos, documentaries and other visuals to assist teaching. 14.86% remained uncertain, while 68.68% respondents disagreed. The mean score is 2.16.

Table 56

*Opinion about Applying Acquired Knowledge and Understanding to New Situations*

S.No	Statement	Level	Frequency	Percentage	Mean Score
15.	Students are helped	SA	38	8.48	
	to apply knowledge	A	42	9.37	
	and understanding to	UNC	75	16.74	2.26
	new situations in	DA	139	31.02	
	various contexts	SDA	154	34.37	

Table 56 reveals that 17.85% respondents agreed that current teaching methodology facilitates the students to apply the acquired knowledge and understanding to new situations in various contexts. 16.74% were uncertain in their responses, while 65.39% disagreed. The mean score is 2.26.

Table 57

*Opinion about Encouraging Cooperation and Collaboration among Students*

S.No	Statement	Level	Frequency	Percentage	Mean Score
16.	Students are encouraged	SA	22	4.88	
	to work in groups and	A	33	7.33	
	pairs	UNC	87	19.33	2.21
		DA	187	41.55	
		SDA	121	26.88	

Table 57 indicates that 12.21% respondents agreed that teachers encourage students to work in groups and pairs. 19.33% were uncertain in their responses, while 68.43% disagreed. The mean score is 2.21.

Table 58

*Opinion about Conducting Discussions and Brain Storming Sessions in the Class*

S.No	Statement	Level	Frequency	Percentage	Mean Score
17.	Discussions and brain storming sessions are arranged in the class	SA	29	6.47	2.27
		A	45	10.04	
		UNC	95	21.20	
		DA	131	29.24	
		SDA	148	33.03	

Table 58 reflects that 16.51% respondents agreed that teachers arrange discussions and brain storming sessions in the class. 21.20% remained uncertain, while 62.27% of the respondents disagreed. The mean score is 2.27.

Table 59

*Opinion about Using Prior Knowledge by Students to Interpret Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
18.	Students are assisted in using their prior knowledge to make meaning of a text	SA	27	6.08	2.36
		A	51	11.48	
		UNC	114	25.67	
		DA	116	26.12	
		SDA	136	30.63	

Table 59 reveals that 17.56% respondents agreed that teachers help students use their prior knowledge to interpret a text. 25.67% of those questioned were uncertain in their responses, while 56.75% disagreed with the statement. The mean score is 2.36.

Table 60

*Opinion about Encouraging Students to Use Visuals to Organize Information*

S.No	Statement	Level	Frequency	Percentage	Mean Score
19.	Students are encouraged	SA	28	6.29	
	to use graphics and	A	55	12.35	
	visuals to organize	UNC	65	14.60	2.19
	information	DA	123	27.64	
		SDA	174	39.10	

Table 60 indicates that 18.64% respondent sample agreed that teachers encourage students to use graphics and visuals to organize information. 14.60% were uncertain in their responses, while 66.74% disagreed. The mean score is 2.19.

Table 61

*Opinion about Assigning Novel Tasks to Promote Creativity*

S.No	Statement	Level	Frequency	Percentage	Mean Score
20.	Students are engaged in	SA	20	4.51	
	novel activities such as	A	50	11.28	
	making additions or	UNC	81	18.28	2.12
	subtractions to literary	DA	130	29.34	
	texts	SDA	162	37.07	

Table 61 reflects that 15.79% respondents agreed that teachers engage students in novel activities in order to promote creativity. 18.28% remained uncertain, while 66.41% respondents disagreed. The mean score is 2.12.

Table 62  
*Opinion about Involving Students in Creative Activities*

S.No	Statement	Level	Frequency	Percentage	Mean Score
21.	Teachers involve students	SA	25	5.65	2.18
	in activities such as	A	45	10.18	
	remaking or redesigning	UNC	79	17.87	
	characters and situations	DA	132	29.86	
		SDA	151	36.42	

Table 62 reveals that 15.83% respondents agreed that teachers involve students in creative activities such as remaking or redesigning characters and situations. 17.87% of those surveyed were uncertain in their responses, while 66.28% disagreed with the statement. The mean score is 2.18.

Table 63  
*Opinion about Motivating Students to Predict Meaning of Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
22.	Students are motivated	SA	28	6.29	2.14
	to predict the meaning of	A	33	7.41	
	literary texts before	UNC	84	18.87	
	teacher gives a lecture	DA	130	29.21	
	on it	SDA	170	38.20	

Table 63 reveals that 13.70 % respondents agreed that students are motivated to predict the meaning of literary texts before a lecture is delivered on it. 18.87% of them were uncertain in their responses, while 67.41% disagreed. The mean score is 2.14.

Table 64

*Opinion about Encouraging Students to Write Journals and Response Essays*

S.No	Statement	Level	Frequency	Percentage	Mean Score
23.	Students are engaged in writing journals and response essays	SA	33	7.38	2.30
		A	47	10.51	
		UNC	93	20.80	
		DA	124	27.74	
		SDA	150	33.55	

Table 64 reflects that 17.89% respondents agreed that teachers of post graduate level engage students in writing journals and response essays. 20.80% of them remained uncertain, while 61.29% respondents disagreed. The mean score is 2.30.

Table 65

*Opinion about Encouraging Students to Conduct Interviews and Surveys*

S.No	Statement	Level	Frequency	Percentage	Mean Score
24.	Students are encouraged to conduct interviews and surveys	SA	28	6.29	2.14
		A	33	7.41	
		UNC	84	18.87	
		DA	130	29.21	
		SDA	170	38.20	

Table 65 reveals that 13.70% respondents agreed that teachers encourage students to conduct interviews and surveys. 18.87% were uncertain, while 67.41% disagreed. The mean score is 2.14.

Table 66

*Opinion about Having Comprehensive Lectures on Texts*

S.No	Statement	Level	Frequency	Percentage	Mean Score
25.	Comprehensive lectures are given on all texts	SA	137	38.62	4.07
		A	184	41.00	
		UNC	43	9.60	
		DA	44	9.82	
		SDA	4	1	

Table 66 reveals that 79.62 % respondents agreed that teachers deliver comprehensive lectures on all texts in class. 9.60 % were uncertain, while 10.82% disagreed with the statement. The mean score is 4.07.

Findings of the data collected through questionnaires for phase 1 and detailed discussion on the findings is given in the next chapter.

## 4.2 Part II: Presentation and Analysis of Phase II Data

Phase II of the study was experimental. The data collected through achievement tests: a pre-test and a posttest for Romantic poetry groups (Appendix D), and a pre-test and a posttest for Fiction II (Modern Fiction) groups (Appendix E) were analyzed by applying  $z$  test (Appendix H). Presentation and analysis of data is given below:

Table 67

*Comparison of Performance of Control Group on Pre-test and Post-test for Romantic Poetry*

$$H_0: P_1 = P_2 \quad \alpha = .01, .05$$

$$H_1: P_1 \neq P_2 \quad \text{Table value} = \pm 1.96, \pm 2.58$$

Test	Mean	Z-test
Pre-test	41.08	4.97
Post-test	46.82	

N=34

Table 67 indicates that the calculated value of  $Z$  is at the higher side of tabulated value so  $H_0$  is rejected and alternate hypothesis  $H_1$  is accepted. As the mean score of post-test is higher than pre-test so standard treatment given is favoured.

Table 68

*Comparison of Performance of Experimental Group on Pre-test and Post-test for Romantic Poetry*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Group	Mean	Z-test
Pre-test	41.73	21.17
Post-test	69.47	

N=34

Table 68 shows that the calculated value of Z is 21.17 which is not in the range of tabulated value, moreover it is greater than tabulated value. Hence there is significant difference between the achievement level of post-test and pre-test. The mean score of post-test is higher than pre-test so it favours the treatment.

Table 69

*Comparison of Performance of Experimental and Control Group on Pre-test for Romantic Poetry*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Group	Mean	Z-test
Experimental group	41.73	1.36
Control group	41.08	

N=34

Table 69 reflects that calculated value of Z is 1.36 which falls within the tabulated value at both levels of  $\alpha$  i.e. .01 and .05, therefore there is no significant difference between the achievement level of the experimental group and control group in pre-test.

Table 70

*Comparison of Performance of Experimental Group and Control Group on Post-test for Romanic Poetry*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Group	Mean	Z-test
Experimental group	69.47	16.14
Control group	46.82	

N=34

Table 70 indicates that the calculated value of Z lies beyond the tabulated value so  $H_0$  is rejected. Hence  $H_1$  is accepted. As the mean score of experimental group is higher than controlled group so the significant difference in achievement level favours experimental group.

Table 71

*Comparison of Performance of Control Group on Pre-test and Post-test for Fiction-II*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Group	Mean	Z-test
Pre-test	47.58	3.41
Post-test	51.20	

N=34

Table 71 reflects that the mean score of the control group for Fiction-II in pre-test is 47.058 while post-test is 51.20 and the calculated Z value is at the higher side of tabulated value. Therefore the standard treatment given is favoured.

Table 72

*Comparison of Performance of Experimental Group on Pre-test and Post-test for Fiction-II*

$$H_0: P_1 = P_2 \quad \alpha = .01, .05$$

$$H_1: P_1 \neq P_2 \quad \text{Table value} = \pm 1.96, \pm 2.58$$

Group	Mean	Z-test
Pre-test	47.82	38.14
Post-test	79.94	

N=34

Table 72 illustrates that the calculated value of Z i.e. 38.14 is at the higher level than table value at both levels of  $\alpha$  .01 and .05 so  $H_0$  is rejected. Hence there is significance difference between the achievement level on post-test and pre-test.

Thus the experimental treatment given is favoured.

Table 73

*Comparison of Performance of Experimental and Control Group on Pre-test for Fiction-II*

$$H_0: P_1 = P_2 \quad \alpha = .01, .05$$

$$H_1: P_1 \neq P_2 \quad \text{Table value} = \pm 1.96, \pm 2.58$$

Group	Mean	Z-test
Experimental group	47.82	1.08
Control group	47.058	

N=34

Table 73 shows that the calculated value of Z lies within the range of tabulated value so  $H_0$  is accepted. Therefore, there is no significance difference between the achievement level of the experimental group and control group in pre-test.

Table 74

*Comparison of Performance of Experimental and Control Group on Post-test for Fiction-II*

	$H_0: P_1=P_2$	$\alpha = .01, .05$
	$H_1: P_1 \neq P_2$	Table value = $\pm 1.96, \pm 2.58$
Group	Mean	Z-test
Experimental group	79.94	21.28
Control group	51.20	

N=34

Table 74 reflects that the calculated value of Z lies beyond the tabulated value. There is a significant difference between achievement of experimental group and control group. The mean score of experimental group is at higher level than control group. Hence the experimental treatment given is favoured.

Table 75

*Comparison of Performance of Control Group on Pre-test and Post-test for Romantic Poetry and Fiction-II*

	$H_0: P_1=P_2$	$\alpha = .01, .05$
	$H_1: P_1 \neq P_2$	Table value = $\pm 1.96, \pm 2.58$
Test	Mean	Z-test
Pre-test	88.14	9.07
Post-test	98.02	

N=34

Table 75 indicates that the calculated value of Z does not lie between the range of table value so  $H_0$  is rejected and alternate hypothesis  $H_1$  is accepted. Therefore there is significance difference between pre-test and post-test achievement level. As the mean score of post-test is higher than pre-test the treatment given is favoured.

Table 76  
*Comparison of Performance of Experimental Group on Pre-test and Post-test for Romantic Poetry and Fiction-II*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Test	Mean	Z-test
Pre-test	89.55	35.67
Post-test	149.41	

N=34

Table 76 reflects that the calculated value of Z is 35.67 which is at higher level than table value at both levels of  $\alpha$ ,  $H_0$  is rejected. Hence there is significant difference between the achievement level of experimental and control groups. As mean score of post-test is higher than pre-test so analysis favours the treatment given.

Table 77  
*Comparison of Performance of Experimental and Control Group on Pre-test for Romantic Poetry and Fiction-II*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Group	Mean	Z-test
Experimental group	89.55	2.41
Control group	88.14	

N=34

Table 77 indicates that the tabulated value of Z is within range at  $\alpha.01$  and  $.05$ . So  $H_0$  is accepted. Therefore, there is no significant difference in the achievement level of both groups on pre-test.

Table 78

*Comparison of Performance of Experimental and Control Group on Post-test for Romantic Poetry and Fiction-II*

$H_0: P_1=P_2$   $\alpha = .01, .05$

$H_1: P_1 \neq P_2$  Table value =  $\pm 1.96, \pm 2.58$

Group	Mean	Z-test
Experimental group	149.4	28.75
Control group	98.03	

N=34

Table 78 reflects that the calculated value of  $Z$  is higher than the tabulated value at both level of  $\alpha$  so  $H_0$  is rejected. Hence alternate hypothesis  $H_1$  is accepted. As the mean score of experimental group is more than that of control groups so the analysis favors experimental treatment given to experimental groups for Romantic Poetry and Fiction-II.

Findings of phase 11 data collected through pre-test and posttest for Romantic Poetry (Appendix D) and pre-test and posttest for Fiction 11 (Appendix E).

Critical evaluation and interpretation of findings for phase I and phase II is presented in the next chapter.

## CHAPTER 5

### ANALYSIS AND INTERPRETATION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of research outcomes, analysis and interpretations of findings along with conclusion, suggestions for future research, and recommendations.

#### *5.1 Summary of Research Outcomes*

The study attempted to explore whether the application of cognitive teaching tools, strategies, and techniques can develop students' creative thinking, and other higher-order thinking skills, and help them become independent, flexible, creative thinkers and problem solvers.

The questions that guided the study are given below:

1. **What are the present literature teaching methods in Pakistani universities and colleges?**

Phase I of the research that is survey, revealed that teaching learning situation of literature in Pakistani universities and colleges has not significantly changed. Methods of teaching literature are not based on cognitive learning psychology. Literature is taught as a combination of cultural, moral and linguistic models. Stereotyped lecture is considered the most useful method because the teacher takes it as her/his responsibility to impart all the relevant information to students, who are desired to accumulate all information and reproduce accurately in exams.

2. **What cognitive processes are involved in creative thinking and what are the functions of creative thinking?**

The cognitive processes involved in creative thinking are pattern recognition, attention, memory, retrieval, and transference.

Creative thinking in the current study is depicted as a combination of convergent and divergent thinking. It is whole brain thinking and creative problem solving. Its characteristics are flexibility, originality, and elaboration. It facilitates to synthesize and evaluate ideas in order to achieve a workable and appropriate solution. Creative thinking thus helps people to be innovative, flexible, collaborative, and creative problem solvers and equip them with the skills to process and organize information and use it in various contexts appropriately.

3. **Can teaching of literature help develop students' creative thinking and other high-order thinking skills?**

The experiment which was conducted for two months if guided by cognitive teaching models proved that teaching of literature if guided by cognitive teaching model can develop students' creative thinking and other higher -order thinking skills.

4. **What are the specific tools, strategies and techniques, which help develop creative thinking and other higher- order thinking skills?**

The specific tools, strategies and techniques to develop creative thinking and other higher-order thinking skills are Po, the PMI, Synectics, Brainstorming, Attribute Listing, Lotus Blossom Technique, Fraction, Discussion Web, Creative Ideas Checklist, The Bird Watching Method, Visualization, Discussion Webs, Advance Organizers, Rotation of Attention, The Reversal Method, Defamiliarization and problem solving process.

## **5.2 Phase I**

### ***Analysis and Interpretation of Findings***

The findings of the survey conducted to investigate the methodology of teaching literature at master's level in Pakistan can be placed into two categories:

- A: Traditional methods of teaching literature are employed
- B: Cognitive teaching methods are neglected

The overwhelming results related to category 1 illustrated by Tables 1, 2, 3, 4, 5, 21, 23, 24, 42 and 66 highlighted that teacher's main responsibility is to cover literature syllabus. The instructional design puts emphasis on aesthetic and moral function of studying literature and prepares students to pass exams at the end of the year or semester. Attempts are also made to use literature as a tool to develop linguistic potential of students. Lecture method is the main method of teaching employed and teachers take it their responsibility to impart all relevant information in the class. The information imparted is focused on the historical and biographical details and opinions and interpretations of well known critics on the text. The main task of the teacher is to cover the prescribed syllabus and prepare students for examinations. Students are required to prepare notes with the help of teacher-delivered information and teacher-referred books. Statistically significant results also show that literature is taught as a tool to teach language (Table 20).

As regards the findings related to the second category, it is overwhelmingly clear that at present the methods of teaching literature are not in tune with the modern research in cognitive learning psychology. Teaching efforts are directed towards helping students' to acquire knowledge and do not encourage them to try to

create new categories and recognize that any perspective is one among many. They are not trained to reflect on the subject matter and analyse it from different angles (Table 45; 46).

Transfer of learning refers to connecting new information with the prior knowledge in order to use it in various contexts and apply it to carry out different related tasks (Elliot et al 2000; Ormrod 2000). It is one of the important cognitive ability required for effective problem solving and is necessary for meaningful learning. The findings reveal as tables 6, 25, 29, 30, 31, 49, 54, 55 and 56 illustrate that there is no consideration for stimulating students' thinking and activating their cognitive processing in the present learning and teaching situation. They are not taught how to use and manipulate the information given to them in various contexts. In this traditional lecture method they are not trained to generate their personal responses to the texts and make attempts to relate literary texts being taught to them with their personal life and the world around them.

Cognitive teaching strategies as the research shows facilitate learners to focus their attention on the required information and then to be able to locate and process it in order to build their response according to the task assigned (Matlin 1989; de Bono 1985; 1986; 1990; 1991). The results of the questionnaires of teachers, students and chairpersons disclose that these important cognitive skills are ignored in the present literature teaching setup (Table 9; 15; 26; 47; 50; 60). Literature review has revealed that creative thinking is a combination of critical and creative thinking or convergent and divergent thinking (Ruggiero 1988, p. 18; Saaty 2001, p.49; Duffy 1998, p.7; Perkins 1988, p.309; Joubert 2001, p.18). It therefore leads to creative problem

solving (Lumsdaine and Lumsdaine 1995; Lucas 2003; Clegg 2000; Flack 1997; Duffy 1998; Halpern 1996). Developing creative problem solving abilities of students is regarded as the primary objective of education in the 21<sup>st</sup> century (Fien 2001; Feden and Vogel 2003; Ruggiero 1988; Safran 2001; Craft 2001; Halpern 2003). Students are required to have necessary problem solving skills to encounter the challenges brought by global market economy, telecommunication and digital technology and to create new resources and generate multiple solutions or perspectives to reach goals. The results of the survey bring to light that students' of literature are not trained in problem solving skills. They are not equipped with the skills to locate similarities and differences and organize information in order to perform the task assigned systematically. The Tables 31 and 36 illustrate this finding.

Creative thinking as the research shows is characterized by flexibility and originality (Swayer 2000; Saddawi 2001). It tends to break established structures and assumptions and stimulate innovation and restructuring (deBono 1986, p. 237; 1987, p. 190; Saati 2001, p.56). There are a number of techniques to nurture creative thinking. The results of the survey show that creative thinking techniques such as dramatizing the texts, making addition to poems or texts and remaking or re-forming characters (Table 12; 61; 62), diary and journal writing recording personal response and commentaries of students (Table 64), projects, seminars and surveys (Table 7; 27; 28; 51; 52; 65) and using electronic resources (Table 16; 41; 42; 48) are ignored in the present literature teaching in Pakistan.

Cognitive learning is regarded as situated learning. It draws heavily upon social cognitive theory (Vygotsky 1962, 1978, 1997; Bruner 1961, 1966) and constructivism (Piaget 1928, 1952, 1959, 1970, 1980). Classroom environment plays an effective role in fostering creative thinking. Thinking skills are stimulated in an environment where personal responses and ideas are encouraged, experiences are shared and there is no insistence on the 'right answer'. Cognitive learning regards interaction among the learners and brainstorming as one of the significant tool to activate effective cognitive processing and stimulate thinking (Lumsdaine & Lumsdaine 1995, p. 199; deBono 1990, p.149). This helps learners to connect the new information with the information stored in their long term memory and build up their ideas and responses required in the situation or context. Tolerance, flexibility and spirit of working together are regarded as important skills to adapt to the rapidly changing global world of today. Tables 11, 33, 34, 57 and 58 in the data presentation chapter illustrate that the students are not motivated to work in groups or pairs and no efforts are made to arrange brain storming and discussion sessions in the class.

Cognitive theorists such as Ashman and Conway (1997, p. 41), Good and Brophy (1997, p. 397), Biehler and Snowman (1993, p.427), Bransford and Stein (1984, p.52) and Boden (2001, p. 96) regard a sound knowledge base as a necessary condition for meaningful learning and stimulation of creative thinking. It is recommended in the research that teachers need to design techniques and strategies which help students to encode and store information effectively so that students are able to establish link between the newly acquired information and their prior knowledge. This ensures in-depth learning and enhances cognitive abilities. The

findings of the survey as Table 59 illustrates that knowledge base building techniques are not incorporated in the methodology of teaching literature.

Twenty first century education as is shown in the research aims to make learners autonomous. It places demands on the students to take responsibility of their learning and develop confidence for taking risks and making discoveries (Fien 2001). The results of questionnaires show that this aim of twenty- first century education is also overlooked in Pakistani literature class rooms. Students are not motivated to reflect on the information imparted to them (Table 45; 46). They are not trained to predict meanings, investigate, infer and ask questions (Table 60; 37; 38). They are also not encouraged to disagree with the critics and teachers and come up with their own interpretations (Table 13; 22; 34; 43; 44).

These findings suggest that teaching methods presently employed are traditional. There can be multiple explanations for this situation. One possible explanation is that teachers of literature are not provided training in modern teaching methods so they remain adherent to classical role of a teacher- the custodian of knowledge and a controlling authority. They are not trained to realize that knowledge and thinking are not opposed but are bound together. The situation demands a change in the teaching methodology. Teaching needs to be a dynamic and not a static activity. Teachers need to leave the security of traditional lessons behind and take risks and adapt their teaching to the demands of the changing times. They need to realize that new concepts and patterns are developed when validity of the established and traditional opinions and assumptions is questioned.

This approach in the researcher's opinion, neither provides genuine understanding of literature nor builds confidence in students, nor prepares them to use information acquired in classroom in various practical life contexts. Another possible explanation may be the existing system of examination which has become one of the chief obstacles to freedom of thought and creativity. Exams are designed to measure students knowledge about literature rather than assessing their experience of studying literature as a part of their day-to-day life or their thinking ability. In addition, this testing system emphasizes content at the expense of thinking and cognitive processing. This adherence to preset goals and standards does not meet the demands of the twenty first century which is an age marked by a lack of conformity, rapid change and complexity brought by globalization and technological developments (Geertsen 2003; Feden and Vogel 2003; Craft 2001; Safran 2001). The current testing system will not enable the students of literature to positively adapt themselves to the world around them and make a positive contribution.

This testing system, in the researcher's opinion, neither helps teachers use literature as a tool for teaching a way of life nor enriches students' aesthetic and moral sensibilities. Teachers remain committed to interpret literature according to the stereotyped examination topics. This nineteenth century educational and testing model has been adopted without any significant modifications in educational institutions in Pakistan. There seems to be no space and consideration in this system and model to give teachers freedom to experiment, be creative and allow students to be flexible, original and creative.

These findings also show that teachers are unaware of current research on teaching literature in accordance with the recent approaches to interpreting literary texts particularly the trend towards interdisciplinarity in literary studies. The recent approaches to interpreting literary texts: reader response criticism, cognitive poetics and deconstruction as the review of the literature shows (Lynn 1994; Murfin 1989; Weber 1996; Birch 1996; Emmot 2003), facilitate students to be flexible and original thinkers and emphasize “the value of teaching young people to think, because that (and certainly not business letter writing) is probably the only real justification for any Humanities program.” (Sonjae; n.d , p. 2). The teachers seem unaware that contemporary research on teaching literature demands teachers to use literature as a tool in order to develop students’ thinking abilities. Students need to be taught to read, interpret, analyse and evaluate texts independently (Hartog 2005; Swalter 2004; Wagner 2005; Knapp 2004).

Thus on the basis of the findings it can be concluded that the existing methods of teaching literature are traditional and are not based on the research in cognitive learning psychology. In addition, it can also be concluded that strategies and tools that facilitate to develop creative thinking and other higher-order thinking skills are not incorporated in the instructional design for teaching literature.

### **5.3 Phase II**

#### ***Analysis and Interpretation of Findings***

Data for the phase II of the research, i.e., experiment was analysed statistically applying z- test. Comparison of the performance of the control groups for Romantic poetry and Fiction II and experimental groups for Romantic poetry and Fiction II was made at pre-test and posttest levels. The following statistical comparisons were made.

1. Comparison of performance of control group on pre-test and posttest for Romantic poetry (Table 67)
2. Comparison of performance of experimental group on pre-test and posttest for Romantic poetry (Table 68)
3. Comparison of performance of experimental and control group on pre-test for Romantic poetry (Table 69)
4. Comparison of performance of experimental and control group on posttest for Romantic poetry (Table 70)
5. Comparison of performance of control group on pre-test and posttest for Fiction II (Table 71)
6. Comparison of performance of experimental group on pre-test and posttest for Fiction II (Table 72)
7. Comparison of performance of experimental and control group on pre-test for Fiction II (Table 73)
8. Comparison of performance of experimental and control group on posttest for Fiction II (Table 74)

9. Comparison of performance of control group on pre-test and posttest for Romantic poetry and Fiction II (Table75)
10. Comparison of performance of experimental group on pre-test and posttest for Romantic poetry and Fiction II (Table 76)
11. Comparison of performance of experimental and control group on pre-test for Romantic poetry and Fiction II (Table 77)
12. Comparison of performance of experimental and control group on posttest for Romantic poetry and Fiction II (Table 78)

The experiment was conducted to investigate whether the application of creative thinking tools and techniques can enhance creative thinking and other higher- order thinking skills of the students of literature. The experiment used simple experiment design of treatment group and control group. Pre-tests, posttests, and pre-test – posttest comparisons were made to asses the performance of the students. The experiment carried out for two months rejected the null hypothesis and accredited the alternative hypothesis that the implementation of creative thinking tools and strategies employed through the cognitive teaching model improved the performance of the students.

At the level of pre-test no significant difference is seen in the performance of control groups for Romantic poetry and Fiction II and experimental groups for the same subjects as is indicated in their mean scores presented in Tables 69, 73 and77. This result confirms that at the start of the treatment the control groups and experimental groups for both of the subjects exhibited similar performance. This

comparison at pre-test level helped to highlight the impact of the experimental treatment which was carried out for two months. On the other hand, results of comparison of the performance of control groups for Romantic poetry and Fiction II and experimental groups for the same subjects at the level of posttest show a significant difference in achievement of both the control groups and experimental groups. The mean score illustrated in tables 70, 74 and 78 clearly indicate that experimental groups for both of the subjects scored significantly higher than the control groups. It confirms that the experimental treatment given for two months helped to nurture students' creative thinking and other higher order thinking skills.

Data analysis of the experimental phase indicates that though there is a difference in achievement of control groups for Romantic poetry (Table 67) and Fiction II (Table 71) in their performance on pre-test and posttest, yet it is not a significant difference as the mean scores of their pre-test and posttest show. This slight difference in their achievement is the result of two months teaching. This result is in contrast to the performance of experimental groups for Romantic poetry (Table 68) and Fiction II (Table 72) who exhibited a far greater development as is indicated in the mean scores of their pre-test and posttest.

The comparison of the performance of control groups and experimental groups was made in terms of development of creative thinking and other higher-order thinking skills. The results confirmed that the experiment was effective in terms of achieving the objectives of the current research. It thus led to a rejection of the null hypothesis and favoured the cognitive teaching model which was employed to teach experimental groups.

### *Cognitive Teaching Model*

The cognitive teaching model prepared to develop creative thinking of the students of literature was designed in accordance with the human information processing model of human cognition and it incorporated the tools and techniques for nurturing creative thinking and Bloom's (1956) ranking of thinking skills. The content i.e. literary texts, was blended with the tools and techniques to nurture creative thinking. The teaching model illustrated in figure 3 and the table (Table 77) which explains the contents of the model are presented on the following pages:

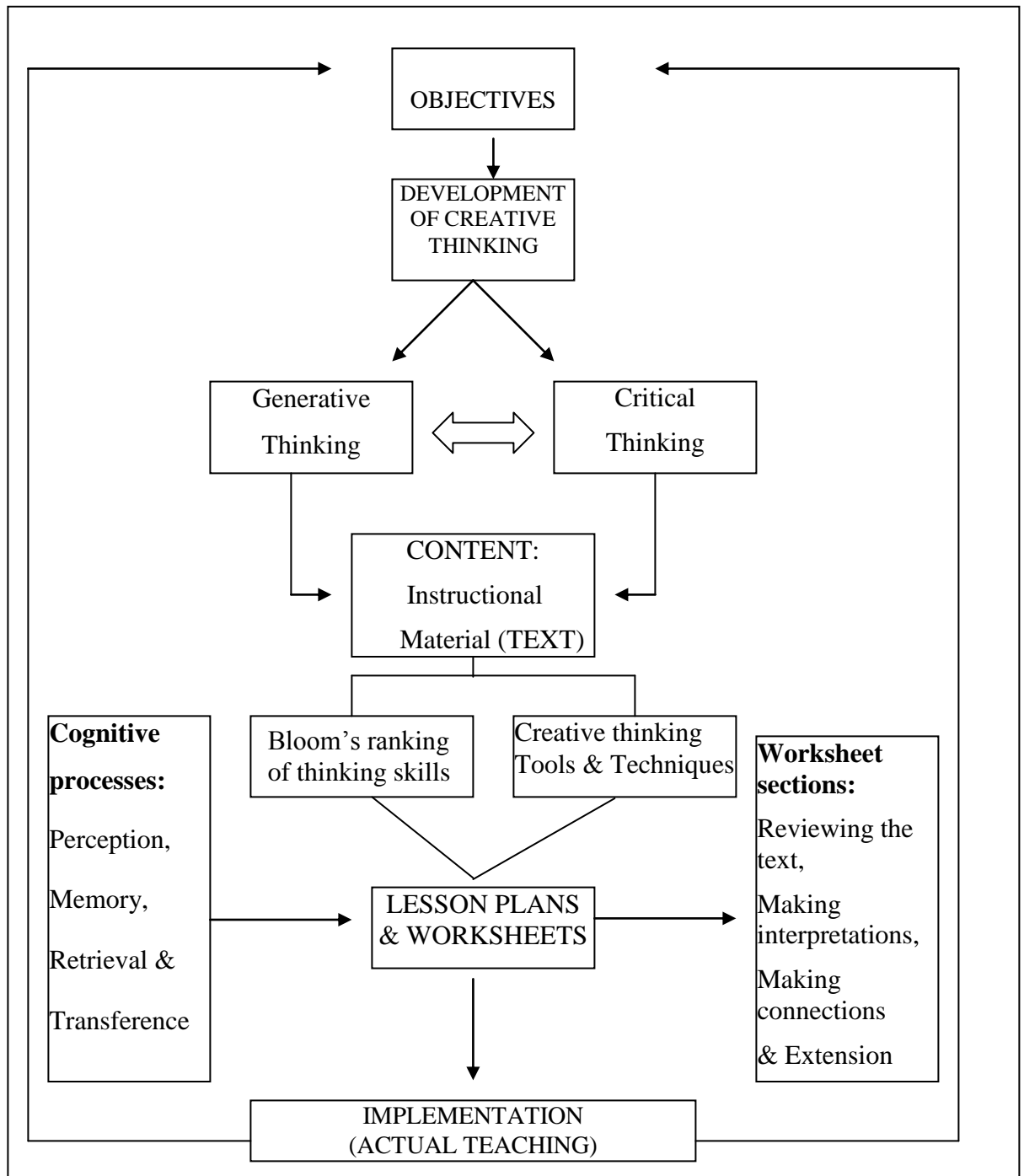


Fig.3. Cognitive Teaching Model for Developing Creative Thinking

Table 79

*Table Explaining the Cognitive Teaching Model*

S. No	Worksheet Sections	Activities	Creating tools and strategies	Bloom's ranking of thinking skills	Cognitive processes
1.	<b>Section: Reviewing Text</b>	Picking up words and phrases Summarizing Locating and selecting information Describing Explaining Defining	The bird watching method  Fraction  Visualization  Pre-reading and prediction  Preparing checklists  In-depth study  Discussion  Collaboration  Mind maps  Repetition	Knowledge and Comprehension	<b>Perception:</b>  Pattern recognition and attention  <b>Memory storage</b>  { <b>Building Knowledge base</b> }
2.	<b>Making Interpretation</b>	Analyzing information Giving explanations Critically examining Annotated reading Generating critical opinion	Preparing checklists  In depth study  Discussion  Collaboration  Mind maps  Repetition	Application and analysis	<b>Perception:</b>  Attention and pattern recognition  <b>Memory storage Retrieval</b>  { <b>Building Knowledge base, Using Knowledge base</b> }
3.	<b>Making Connections</b>	Comparing and contrasting Connecting texts with students' personal life	Transference of information  (Using information in various context)	Synthesis  And Application	<b>Perception:</b>  Attention, pattern recognition  <b>Memory</b>

		and experiences Generating personal opinions Comparing films texts Sharing alternations	Making connections  Brain storming and discussions  Collaboration Syntactic  Visualization  Discussion webs  Rotation of attention		<b>storage</b>  (Networking in memory)  <b>{Using Knowledge base} and Transference</b>
4.	<b>Extension</b>	Preparing presentation Working on projects Manipulating texts for innovative activities Rearranging texts Writing reading journals, letters to people in texts Conducting interviews with people in texts Writing biographies of imaginary characters Quoting critical innovative ideas Writing creative response essays and critical commentaries Writing plays poems Adding information to texts	Synecotics  Putting to other uses  The reversal method  Rearranging and restructuring  Follow up activities  The PMI  PO  Collaboration  Brain storming and discussion  Learning with projects  Visualization  Rotation of attention  Diversion and extensions  Defamiliarization	Synthesis and evaluation	<b>Perception:</b>  Attention and pattern recognition  <b>Memory:</b>  Networking in memory  <b>Retrieval Transference</b>      <b>{Using Knowledge base}</b>

		Reversing texts including innovative ideas Dramatizing texts Writing reports on imaginary situations Adopting text for writing film scripts			
--	--	--	--	--	--

### *Cognitive Teaching Model and Lesson Plans*

Cognitive teaching model provided the theoretical framework to teach the experimental groups for Romantic poetry and Fiction II. The model was implemented through lesson plans which were supplemented with worksheets. Each lesson plan provided information about length, overview, purpose of the lessons, strategies and techniques to develop creative thinking included in the lessons and objectives, material, and procedure of the different session of the lessons. The purpose of each lesson plan was to give students practice in strategies and techniques that developed creative thinking and other higher order thinking skills. Lesson plans were designed to help students read the text critically, and give a creative response to it. They aimed at helping students to become independent learners and work in collaboration. Creative thinking tools and techniques were text based and taught through teaching activities which were graded from simple activities like collection of basic information to more sophisticated activities like synthesis and evaluation. These tools and techniques were sequenced in four sections of the worksheet supplementing the lesson plans and repeated in all the lesson plans. The objectives of

each lesson were designed keeping in view students' comprehension and language proficiency level. The activities and exercises in these lesson plans were graded according to Bloom's (1956) taxonomy of educational objectives in cognitive domain. The activities were divided into four sections:

1. Reviewing the text
2. Shaping interpretations
3. Making connections
4. Extension.

Following strategies and techniques were incorporated in the lesson plans to develop students' creative thinking:

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Annotated Reading
- Rehearsal
- Organizing Material
- Learning with Projects
- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement

- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

The lesson plans encouraged students to critically analyse texts or information, organize information, use tables and charts and other visual techniques, take notes, make independent interpretations, generate personal responses, draw comparisons, connect the text with other subject areas and real life, write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays.

In teaching sessions students were encouraged to work in pairs or groups or interact in brainstorming sessions. They were encouraged to predict, infer, investigate and generate their ideas without any hesitation.

### ***Worksheets***

Lesson plans were supplemented with worksheets. The work sheets provided an intensive training to students in creative thinking skills. Each work sheet comprised four sections: Reviewing the Text, Making Interpretations, Making Connections, and Extension. The detail of each section is given below:

### Reviewing the text

This section was based on the lowest category of Bloom's taxonomy of thinking skills, i.e., knowledge (1956, pp. 62-63). This category prepares a learner to collect certain required information and remember it. It helps students' to gather basic data needed to represent problems or plan to carry out the assigned task. The activities in this section were designed to train students to focus their attention on required information. As for example activities in this section in the worksheet 1 for Romantic Poetry lessons included:

- a. Read lines 160- 168. Locate the characteristics of a good poet and present the information in the form of a flow chart.
- b. Read lines 269-362 and explain briefly following lines, phrases, and words in the context of the poem.

Words, Phrases and Lines	Explanation
Unprofitable traveling	
False steward	
Blend his murmur with my nurse's song	
Sweet	
Tempering our human waywardness	
Composing my thoughts	
Fretful dwelling of mankind	
The calm	
Nature breathes among the hills and grooves	

A playmate	
Naked savage	
Seed time	
Fostered alike by beauty and fear alike	
Nine summers	
The captive of another's toil	
Becomes by play	
Low breathing coming after me	
Sound of undistinguishable motion	
Mean my object	
The end was not ignoble	
Dark invisible workmanship	
Reconciles discordant elements	
Move in society	
Made up the calm existence	
Praise to the end	
Thanks likewise for the means	

Similarly Worksheet I of Fiction II Lesson plan included the following activities in this section:

- i. Read the novel *Heart of Darkness*. Discuss in groups and find the characters, objects, incidents, situations and settings which denote the imperialist intent of the

French and fill in the table below. You may add more activities similar to the ones already given.

<b>Objects</b>	<b>Brief description</b>	<b>How do they contribute to imperialism?</b>
Misunderstanding about two black hens (p.23)		
Two women knitting black wool (p.25)		
French Steamer (P.27)		
Shells, muzzles, guns screech (P.28)		
Ship of war firing into a continent (P.28)		
Railway truck (p.29)		
Chain-gang (p.30)		
A white man in an unexpected elegant		

get up (p.32)		
Accountant's office (p.33)		
Network of paths over the empty land (p.34)		
Ruined grass walls (p.34)		
Body of a middle- aged negro, with a bullet-hole in the forehead.		
Brick maker (p.38)		
The beaten nigger (p.38)		
Sinister effects of torch light in the oil painting (p.39)		
Boiler (p.51)		
Tattered flag P.52)		
Dismantled dwelling of a white man.(p.52)		

- ii. Consult your notes and summarize Conrad's depiction of imperialism through characters, objects, incidents, situations and settings.

**Detailed worksheets are given in appendix F and G.**

### **Making Interpretations**

This section was developed according to the second and third category of Bloom's taxonomy, i.e., comprehension and application (1956 pp. 89-90; 120). Comprehension level enables students' to understand the question or the problem they encounter and make some use of the information and ideas contained in it. Application, however, refers to the transference of information. Students are enabled to use the information learnt in various contexts appropriately. This section of the worksheet provided the students practice in examining information critically. It included activities for comprehension and transference. For example in Worksheet I for Romantic poetry the following questions were included:

- a. Why did the poet make a connection between the song of river Derwent and the child's mind?
- b. What did the poet mean, in your opinion, when he said that the music of the river has tempered "human waywardness" and "composed" his "thoughts to more than human softness"?
- c. What has made the poet believe that nature was a living phenomenon?
- d. Examine lines 271-285 with reference to Rousseau's *Emile* and comment on the similarity of thought.

- e. How do the bird hunting and the bird stealing incidents justify poet's belief in Nature as a guardian spirit?
- f. Wordsworth's love for nature is generally divided in the following three stages:
  - Sensuous pleasure in beauties of nature
  - Intellectual understanding between man and nature
  - Spiritual relation with nature

Read lines 270-350 and analyze these lines in the light of the given stages and explain what stage these lines refer to?

Similarly Worksheet I for Fiction II Lesson plan included the following questions:

- i. What types of activities are being carried out in the continent?
- ii. Do you think these activities are in accord with the colonizers' so called plan to civilize the uncivilized brutes?

**Detailed worksheets are given in appendix F and G.**

### **Making Connections**

This section incorporated three categories of Bloom's taxonomy which are analysis, synthesis and evaluation (1956, pp. 144; 162; 185-186). Analysis requires students to be able to detect as well as build connections in the various elements of the given problem. Synthesis is a creative exercise as it provides for putting together of elements into a novel pattern or structure. Evaluation, on the other hand, is appraising ideas and information. This section served to train students in building up connections by tracing out similarities and differences. It also encouraged them to

generate personal opinions and judge the information for using it in various contexts appropriately and innovatively. As, for example, the worksheet 1 for Romantic Poetry including the following activities:

- a. Refer to the description of river Thames in *The Rape of the Lock* and compare Pope's description with Wordsworth's description of river Derwent in *The Prelude* and complete the table below:

Similarities	Differences

- b. Refer to some of your sweet childhood memories and describe what role do they play in your present day to day life?

Similarly Worksheet I of Fiction II included the following activities:

- i. Discuss within groups and explain the way Chinua Achebe has treated the theme of colonialism in his novel *Things Fall Apart*.
- ii. What differences and similarities do you trace between the marginalized nations as presented in two novels: *Passage to India* and *Heart of Darkness*?
- iii. Discuss and generate ideas for the following statement and complete the web:

<b>NO</b>	<p>Both, Conrad and E.M. Forster are partial in their treatment of the natives, only Chinua Achebe represents them truly</p> <p><b>Conclusion</b></p>	<b>Yes</b>
-----------	---	------------

**Detailed worksheets are provided in appendix F and G.**

***Extension***

This section incorporated mainly two categories of Bloom’s taxonomy of thinking skills which are synthesis and evaluation (1956, pp. 162; 185-186). This section provided training in generating innovative and creative ideas and interpretations and evaluating them. It also included creative activities and exercises demanding restructuring and rearrangement of issues. This section provided practice in generative thinking. For example worksheet 1 for Romantic Poetry included the following activities:

- a. Prepare a presentation on lines 259-365 assigning the role of protagonist to nature.
- b. Record in your Reading Journal the experience of the poet reversing it from fear to happiness.

Similarly worksheet 1 for Fiction II lesson plan included the following activities:

- i. Discuss in groups the damage done to the marginalized nations by the Imperialists. Do include the destruction of economy, culture, social set up, political set up, religious and educational institutions, and language domain of the indigenous and displaced nations.
- ii. Imagine Shakespeare's *Julius Caesar* as the colonizer of Africa. Discuss in groups and contrive a scene in Congo, illustrating the life of Africans under the new system implemented by Romans. What differences and resemblances would you find under the French and the Roman imperialists
- iii. Imagine yourself to be one of the members of the colonized Africans who appeared in the text, talking to Kurtz, Marlow and the company Manager, telling them openly what the superior masters have done to the Africans, their homes, families, culture and economy. Discuss in group and write a one act play and present this play in the class.

Thus the experiment carried out through the cognitive teaching model supplemented with lesson plans and worksheets helped students gain practice in whole brain thinking which is creative thinking as defined in the current study.

#### ***Analysis of the Effectiveness of the Cognitive Teaching Model***

The study evaluated the effects of the use of cognitive teaching model to develop creative thinking of students of English Literature at Master's level by using specifically designed worksheets during the treatment period and subject- based creative thinking pre-tests before the start of the experiment and posttests at the end of the treatment period.

Limitations associated with this study included the sample, which was though randomly selected but was limited to the female students only, and this available sample was considered barely enough for the purpose of the study. But in spite of this limitation, the study is useful, as no study to date in Pakistan has investigated the effects of the implementation of cognitive teaching model incorporating the creative thinking tools and techniques.

In the researcher's opinion the most significant finding from this investigation is that the students' creative thinking skills, which include originality, elaboration, flexibility, and creative problem solving, were enhanced. Pre-tests, posttests, and pre-tests- posttests comparisons indicate clearly the increase in creative thinking skills and other higher-order thinking skills of students in treatment groups but no significant development, in this regard, is observed in the students of control groups.

In addition, the results also revealed that the proposed cognitive teaching model had a positive effect on the students' confidence, independence, and communicative and collaborative skills. They also exhibited greater interest in literary texts even when they were not taught from the examination point of view. The interest in studying literature generated through the cognitive teaching model can also be attributed to the development of students' transference skills. They could perceive a link between life and literary texts or could manipulate texts for learning communication skills and problem solving skills.

The cognitive teaching model was an opportunity for students to generate personal innovative ideas, share ideas, be engaged in transference and extension

activities, process, organize, and synthesize information, and study literature as a life-relevant subject. The model attempts to be in line with the methodology of studying literature suggested by reader response literary theory and criticism. The model facilitates students to develop their unique interpretative skills and be independent and autonomous learners who are able to generate interpretations which are in accordance with their beliefs, social and cultural contexts, and knowledge base. The model provided students with in-depth study of literature. They were engaged in multiple activities ranging from simply locating specific information to using information creatively. They resultantly, learnt to be flexible, critical, innovative and elaborative.

The model provided students ample opportunities to discuss, share, and communicate. As a result, their English language skills were polished. The practice in writing reading journals and response essays resulted in their improved writing and reading skills and confidence to express their personal views and thoughts in writing. With English as their second language, the students had developed a fear for academic writing, which was seen gradually over come by continuous practice in writing personal response essays and journals.

The activities such as redesigning and restructuring literary texts, projects, research assignments, conducting interviews, and arranging dialogues and presentations equipped students with confidence and autonomy, in addition to giving them an awareness of their own creative potential. It is expected that this training would enable them to be an effective part of workforce of the country.

The most useful outcome of the experiment was the increase in students' ability to analyze the situation or events critically and respond to it creatively. They learnt to break the established conventional structure of thinking, create new structures and develop their creative problem solving skills.

The experiment provided students of treatment groups with the opportunity to have their creativity polished. All the students who experimented with the tools and techniques of creative thinking gained creative thinking skills and other higher order thinking skills and learnt to employ them in solving real life problems and managing other subjects in the curriculum. Students gained new tools with which they could express their creativity. Students in treatment groups became more creative after they worked on tasks and exercises that motivated them to discover their own ideas and use them in creative way.

Studying literature with cognitive teaching model did not impede students' understanding of literature but in fact helped them communicate and generate ideas independently and then organize them for better interpretations. One of the obvious reasons was the reader response approach to the interpretation of literary texts, which served as a foundation for the application of cognitive teaching strategies and techniques to nurture creative thinking and other higher-order thinking skills of students. This approach like other post modern approaches to the study of literature such as deconstruction, contextualization, and cognitive poetics recommends a methodology of teaching literature which takes literature as a tool to teach inquiry and investigation, information processing skills, creativity and problem solving. This

approach thus, serves to prepare students to accommodate in the twenty first century – the age of globalization, telecommunication and digital technology.

The model was a systematic application of reader response theory in order to develop students' creative thinking and other higher-order thinking skills and the performance of the students made it clear that studying literature with this theory is actually an exercise in creative thinking. The readers with this method assume the role of explorer and creative thinkers. In the model the strategies and techniques to develop 'informed reader' included organizing material, working on projects and presentations, meaningful learning, in depth study, rehearsal. The techniques which assist students to be involved in the world of the text included note taking, summarizing, comprehension activities, elaboration, and visualization. The techniques, which help students to use their backgrounds to negotiate the meanings of a text, included inference, transference, making connections, elaboration, writing response essay. The techniques of pair work and group work, discussions, brainstorming, and working with projects helped students share the ideas and make decisions about the most appropriate interpretations and meaning of a text. Thus the model, as it was based on research on human cognition and cognitive processing provided a systematic framework to apply reader response methods to teaching literature.

#### ***5.4 Conclusion***

This study was carried out for three main purposes. First purpose was to conduct a survey in order to investigate the existing teaching literature methods at master's

level in Pakistani universities and colleges. Second purpose was to use the data collected through survey as rationale for the experiment to be carried out to develop creative thinking of the students. The third purpose was to explore through the experiment whether the cognitive teaching model which incorporates creative thinking tools and techniques can help develop creative thinking and other higher-order thinking skills of students of literature.

The study started with the assumption that present methods of teaching literature are behavioral and humanist. These methods help students to learn about literature by exploring biographical and socio-historical context of literary texts and do not contribute in developing students' cognitive processes. Data collected through the survey supported the assumption as the findings indicated that methods of teaching literature at Master's level in Pakistani universities and colleges are traditional and are not based on research in cognitive learning psychology. The findings of the survey, thus provided rationale to develop a cognitive model for teaching literature and conduct second phase of the research i.e. experiment. The experiment conducted introduced a migration from inherited traditional methods of teaching literature as it attempted to explore exciting possibility of applying research in cognitive learning psychology in designing activities for teaching literature. Statistical analysis of the data of the second phase i.e. experiment rejected null hypothesis and indicated that the cognitive teaching model used for teaching literature nurtured creative thinking and other higher-order thinking skills of students. The results illustrated that the cognitive teaching model facilitated students to imagine literature, learn transference skills and be able to relate literature with

their life, interact with literary texts, acquire skills to comprehend, organize, synthesize, and evaluate information, to share, generate, and elaborate ideas, and make attempts to create knowledge rather than store and reproduce information.

The current research attempted to develop an approach that combines literary studies and cognitive science and to prove that cognitive psychology can help update, renew, and redesign methods of teaching literature and equip students with necessary skills to manage complicated issues of the twenty first century- the age of globalization, telecommunication, and digital technology.

As to date no research in thinking skills has been conducted in Pakistan, it is hoped that this study will help conduct research in more sophisticated cognitive teaching methods and resultantly bring improvement in teaching learning situation in Pakistan. The researcher is of the opinion that when innovative models of teaching are explored and discussed, and new instructional design are experimented to nurture creative and other higher-order thinking skills of learners, then teachers will truly be able to claim that they are training the young learners for the effective citizenship of the twenty first century society because our future depends on our intellectual abilities and our creative abilities.

### ***5.5 Suggestions for Future Research***

This section discusses the factors that would have enhanced the effectiveness of the treatment and survey.

The implementation of the training programme for developing creative thinking and other higher-order thinking skills in two months might not have been

long enough to produce ideal changes in the students of experiment groups. Lesson plans and teaching activities were designed keeping in mind the time constraints. Each teaching session as scheduled in the timetable of the department of English, International Islamic University, Islamabad was of one hour duration. As a consequence teaching activities, in particular in the “Extension” section of the worksheets could not be given due time. Therefore, it is suggested that in future long-term implementation of creativity training programme should be considered.

The available sample for the experiment and survey was another issue that influenced the result of this study. The participants of the experiment were only the female students of English literature studying at International Islamic University, Islamabad. In future both male and female students should be trained and assessed with different experiment designs. The response of the male students might be different to the creative thinking development programme due to difference in their level of interest in the training, aptitude towards learning creativity, and aims and objectives for studying literature or pursuing literature degree. The study conducted on both male and female participants might highlight socio-cultural factors that hinder or enhance creative thinking.

The survey data was collected from universities and post- graduate colleges of the Punjab and Islamabad and the results were generalized. The response of students, teachers, and chairpersons of the departments of English in the institutions of other provinces, which include Sindh, N.W.F.P., and Balochistan, might be different. There can be multiple reasons for this difference such as availability of resources, general environment, job opportunities, attitude towards learning and

creativity. Therefore, it is suggested that in future studies may be conducted to collect data from these provinces in order to gather empirical results, which may serve as need assessment to develop creativity development programmes and effective instructional designs.

Another factor that may affect the results of the study is tests to measure creative thinking and other related thinking skills. Though general creativity measurement tests such as Torrance Test for Creativity are available but the present research required subject specific tests based on specific literary texts. As such tests were not available so the researcher designed the pre-tests and posttests. The tests were based on the literary texts included in the approved syllabus of the department of English, International Islamic University, Islamabad, and tested the creative thinking tools and techniques which were incorporated in the lesson plans and worksheets used during the treatment period. Therefore, they were more relevant and validated the assessment of development of creative thinking. It is recommended that research should be carried out to develop more comprehensive and valid subject specific creativity tests for literary studies and other allied disciplines.

The findings from the first phase of this study about the present teaching literature methods in Pakistani universities and colleges, and from the second phase about the effect of a creativity training programme on the students of literature raised a number of issues that may be addressed in future studies.

Through out this study one question has continued to surface. Why do teachers continue to teach with humanistic approach when modern research continues to show that humanistic model does not cater to the need of students to

meet the challenges of the twenty first century? Do teachers deliberately resist the cognitive teaching methods or are simply unaware of them and have no relevant training? In this regard, it is suggested that surveys can be conducted to investigate these questions in detail. It could be investigated whether teachers continue to use traditional humanistic methods because they are recommended in the curriculum and are in accordance with the aims and objectives of general educational policy or because teachers are unaware of modern cognitive methods and are not trained to use them, or because testing and assessment system has put restraints on teachers. The results of survey may indicate areas significant for future research.

Reasons to carry out research in the area of creative thinking and other thinking skills are abundant. Development of creative thinking and other higher-order thinking skills of students will contribute in the development of human resources in Pakistan. These individuals may add into the well being of society by influencing people around them in changing the conventional structures of their thinking and behavior. More experimental research could be carried out on the application of thinking skills tool and techniques on students of literature and other allied disciplines in order to develop more relevant and sophisticated tools and strategies.

The current study employed survey and experiment design and used quantitative methodology. Therefore, it would be useful if in future research qualitative methodology is used to examine training programmes designed to develop creative thinking and other higher- order thinking skills of students of literature. This would contribute to an understanding of how creative thinking and

other higher-order thinking skills, and literary studies are related and as a result, it would promote the development of new educational and pedagogical strategies.

## **5.6 Recommendations**

Following recommendations are made on the basis of the findings of the research:

1. Literature should be used as a tool to develop students' creative thinking and other higher- order thinking skills.
2. Instructional design for teaching literature should take the demands of the twenty first century into consideration and in this regard, special teacher training courses should be arranged to train teachers in cognitive teaching.
3. Students should be motivated to do research assignments and work on projects and presentations. They should be encouraged to infer and investigate and be able to draw their conclusions.
4. Students should be motivated and engaged to organize creative activities such as dramatizing literary texts, making additions to the text, substituting the characters in the texts.
5. Students should be taught the techniques to locate, process, and organize information.
6. Literature should be related with the students' life and experiences, practical world, and other subjects. They should be taught transference skills i.e. applying knowledge in various contexts.
7. Literature should be taught as a tool to learn problem-solving skills i.e. to enable the students to present a problem or an issue, generate multiple

solutions, apply appropriate ideas to solve the problem, and then evaluate the results.

8. Collaboration, cooperation and communication among students should be encouraged.
9. Emphasis should not be laid on teaching the contents and form of texts but on developing students' creative thinking, and other higher-order thinking skills.
10. Thinking skills components may be infused in existing syllabus of literature.
11. Courses on creativity and thinking skills may be introduced as a part of degree programmes for literature.

It is also recommended that teaching of thinking which is regarded as a necessity to manage life successfully in the twenty first century – the age of globalization, telecommunication, and economic competition, may be considered as the highest priority not only in literature but also other allied disciplines. Future research that may follow this study could be an investigation of cognitive teaching model applied on female and male students studying in different institutions at different levels, and more importantly an investigation to develop cognitive assessment model to measure the development of creative thinking and other higher-order thinking skills. These, it is hoped, would be exciting and useful researches and contribute in bringing positive changes in the teaching learning situations in Pakistan.

## WORKS CITED

- Allen, G. (2003). *Roland Barthes*. London: Routledge.
- Albrecht, K. (2002). Brain power: People can be trained to use their brains more effectively for creativity, problem solving, and other thinking. *T+D*. Retrieved November 12, 2006, from [http://www.findarticles.com/p/articles/mi\\_mOMNT/is\\_11\\_56/ai\\_94174471](http://www.findarticles.com/p/articles/mi_mOMNT/is_11_56/ai_94174471)
- Andersen, C. (2004). Learning in “as-if” worlds: Cognition in drama in education. *Theory into practice*. Retrieved November 3, 2006, from [http://www.findarticles.com/p/articles/mi\\_m0NQM/is\\_4\\_43/ai\\_n8686066](http://www.findarticles.com/p/articles/mi_m0NQM/is_4_43/ai_n8686066)
- Anderson, J.R. (1990). *Cognitive psychology and its implications* (3<sup>rd</sup> ed.). New York: W.H. Freeman.
- Ashcraft, M.H. (1998). *Fundamentals of cognition*. New York: Longman.
- Ashman, A.F., & Conway, R. N.F. (1997). *An introduction to cognitive education: Theory and application*. New York: Routledge.
- Atkinson, R., & Shiffrin, R. (1968). Human memory: A proposed system and its control processes. In K Spence & J Spence (Eds.) *The psychology of learning and motivation: Advances in research and theory* (Vol. 2). New York: Academic Press.
- Badi, J., & Tajdin, M. (2005). *Creative thinking: An Islamic perspective* (2<sup>nd</sup> ed.). Kuala-Lumpur: Research Centre, IIUM.
- Bandura, A. (1977). *Social learning theory*. Upper Saddle River, NJ: Prentice Hall.
- Bandura, A. (1986). *Social foundation of thought and action: Social cognitive theory*. Upper Saddle River, NJ: Prentice Hall.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44, 1175-1184.

- Barnet, S. (1996). *A short guide to writing about literature*. (7<sup>th</sup> ed.). New York: Harper Collins.
- Basnett, S. (2005). Literature teaching in the Twenty-First century: A hopeless endeavour or the start of something new. *The Cambridge Quarterly*, 34, 203-212. Retrieved November 3, 2006, from [http:// camqtly.oxfordjournals.org/](http://camqtly.oxfordjournals.org/)
- Bazerman, C. (1989). *The informed writer: Using sources in the disciplines* (3<sup>rd</sup> ed.). Boston: Houghton Mifflin.
- Beach, R. (2000). Critical issues: Reading and responding to literature at the level of activity. *Journal of Literacy Research*. Retrieved November 15, 2006, from [http://www.findarticles.com/p/articles/mi\\_qa3785/is\\_200006/ai\\_n8889774](http://www.findarticles.com/p/articles/mi_qa3785/is_200006/ai_n8889774)
- Bennet, A., & Royle, N. (1995). *An introduction to literature, criticism and theory: Key critical concepts*. London: Prentice Hall & Harvester Wheatsheaf.
- Bertens, H. (2001). *Literary theory: The basics*. London: Routledge.
- Biehler, R.F., & Snowman, J. (1993). *International student edition: Psychology applied to teaching* (7<sup>th</sup> ed.). London: Houghton Mifflin.
- Birch, D. (1996). 'Working effects with words'-whose words?: Stylistics and reader intertextuality. In J. J. Weber (Ed.), *The stylistics reader: From Roman Jakobson to the present* (pp.206 - 221). New York: Arnold.
- Blakolo, M., & Afemikhe, O.A. (2002). The effect of literature based reading on gifted students in Botswana. *Research in education*. Retrieved November 11, 200-6, from [http://www.findarticles.com/p/articles/mi\\_qa3765/is\\_200211/ai\\_n9100207](http://www.findarticles.com/p/articles/mi_qa3765/is_200211/ai_n9100207)
- Bleich, D. (1978). *Subjective criticism*. Baltimore: The John Hopkins University press.
- Bloom, B.S. (Ed.). (1956) *Taxonomy of educational objectives: The classification of educational goals: Handbook I: Cognitive domain*. New York: David McKay.
- Boden, M.A. (2001). Creativity and knowledge. In A. Craft, B. Jeffrey, & M. Leibling (Eds.), *Creativity in education* (pp.95 - 102). London: Continuum.
- Bourne, L.E.jr., Dominowski, R.L., Loftus, E.F., & Healy, A. F. (1986). *Cognitive processes*. (2<sup>nd</sup> ed.). Englewood Cliffs, NJ: Prentice -Hall.
- Bower, G.H., & Hilgard, E.R. (1986). *Theories of learning* (5<sup>th</sup> ed.). New Delhi: Prentice Hall of India.

- Brandt, C. (1999). The Epic of Gilgamesh: In the high school writing classroom. In C. Edgar, & R. Padgett (Eds.), *Classics in the classroom: using great literature to teach writing* (pp. 10-12). New York: Teachers and Writers Collaborative.
- Bransford, J.D., & Stein, B.S. (1984). *The ideal problem solver: A guide for improving thinking, learning and creativity*. New York: W.H. Freeman.
- Brookfield, S.D. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. England: Open University Press.
- Bruer, J.T. (1994). *Schools for thought: A science of learning in the classroom*. London: The MIT Press.
- Bruner, J.S. (1961). The act of discovery. *Harvard Educational Review*, 31, 21-32.
- Bruner, J.S. (1966). *Towards a theory of instruction*. Cambridge, MA: Harvard University Press.
- Bruner, J.S., Goodnow, G.J., & Austin, G. (1956). *A study of thinking*. New York: Wiley.
- Bulgren, J.A., Deshler, D.D., Schumaker, J.B., & Lenz, B.K. (2000). The use and effectiveness of analogical instruction in diverse secondary content classrooms. *Journal of Educational Psychology*, 92 (3), 426 -441.
- Burke, M. (2003). Literature as parable. In J. Gavins, & G. Steen (Eds.), *Cognitive poetics in practice* (pp.115 - 128). London: Routledge.
- Buzan, T. (1988). *Make the most of your mind*. London: Pan Books.
- Carter, R., & Long, M.N. (1991). *Teaching literature: Longman handbooks for language teachers*. New York: Longman.
- Chandran, K.N. (2006). On English from India: Prepositions to post-positions. *The Cambridge Quarterly*, 35 (2), 151-168. Retrieved December 15, 2006 from [http:// www.camqly.oxfordjournals.org/](http://www.camqly.oxfordjournals.org/)
- Clegg, B. (2000). *Instant brain power (1<sup>st</sup> South Asian ed.)*. New Delhi: Kogan Page.
- Craft, A. (2001). Little, C. Creativity. In A. Craft, B. Jeffrey, & M. Leibling (Eds.), *Creativity in education* (pp.45 - 61). London: Continuum.
- Craik, F., & Lockhart, R. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Thinking and Verbal Behavior*, 11, 671-684.

- Davis, J. N. (1992). Reading literature in the foreign language: the comprehension/response connection. *The French Review*, 65 (3), 359-370. Retrieved December 20, 2006, from <http://www.jstor.org/>
- Davis, J. N. (1989). The act of reading in the foreign language: Pedagogical implications of Iser's reader-response theory. *The Modern languages Journal*, 73 (4), 420-428. Retrieved December 20, 2006, from <http://www.jstor.org/>
- Davis, T.F., & Womack, K. (2002). *Transitions: Formalist criticism and reader-response theory*. New York: Palgrave.
- Day, J., Speigel, D.L. McLellan, J., & Brown, V.B. (2002). *Moving forward with literature circles*. New York: Teaching resources/ Scholastic.
- deBono, E. (1985). *deBono's thinking course*. New York: Facts on File Publications.
- deBono, E. (1986). *The mechanism of mind* (rpt.). England: Penguin Books. (Original work published 1971)
- deBono, E. (1987). *Letters to thinkers: Further thoughts on lateral thinking*. London: Harrap.
- deBono, E. (1990). *Lateral thinking: Creativity step by step* (1<sup>st</sup> Perennial Library ed.). New York and London: Harper and Row. (Original work published 1970)
- deBono, E. (1991). *Teaching thinking* (rpt.). London: Penguin Books. (Original work published 1976)
- Di Yanni, R. (2002). *Literature: Reading fiction, poetry, and drama* (5<sup>th</sup> ed.). New York: McGraw Hill.
- Dresang, E.T., & McClelland, K. (1999). Radical change: Digital age literature and learning. *Theory into Practice*, 38, 160-167. Retrieved March 24, 2006, from <http://www.jstor.org/>
- Duffy, B. (1998). *Supporting creativity and imagination in the early years*. Buckingham: Open University Press.
- Dybdahl, J. (1992). Composition and creativity: From discrete units to a synthetic whole. *Hispania*, 75(3), 736-738. Retrieved April 5, 2006, from <http://www.jstor.org/>
- Eagleton, T. (1996). *Literary theory: An introduction* (2<sup>nd</sup> ed.). USA: The University of Minnesota Press.

- Edwards, H., Smith, B., & Webb, G. (Eds.). (2001). *Lecturing: Case studies, experience and practice: Case studies of teaching in high education*. London: Kogan Page.
- Egan, K. (2005). *An imaginative approach to teaching*. San Francisco, CA: Jossey-Bass.
- Elliot, S.N., Kratochwill, T.R., Cook, J. L., & Travers, J.F. (2000). *Educational psychology: Effective teaching effective learning* (3rd ed.). New York: McGraw-Hill.
- Ellis, H.C., & Hunt, R.R. (1993). *Fundamentals of cognitive psychology* (5<sup>th</sup> ed.). New York: McGraw Hill.
- Ellis, H.C., & Hunt, R.R. (1989). *Fundamentals of human memory and cognition* (4<sup>th</sup> ed.). Dubuque, IA: W.C. Brown.
- Emmott, C. (2003). Reading for pleasure: A cognitive poetic analysis of ‘Twists in the tale’ and other plot reversals in narrative texts. In J. Gavins, & G. Steen (Eds.), *Cognitive poetics in practice* (pp. 145- 160). London: Routledge.
- Farris, C. (2004). Teaching the teaching of literature. *Peer Review*. Retrieved November 10, 2006, from [http://www.findarticles.com/p/articles/mi\\_qa4115/is\\_200404/ai\\_n9465079](http://www.findarticles.com/p/articles/mi_qa4115/is_200404/ai_n9465079)
- Feden, P.D., & Vogel, R.M. (2003). *Methods of teaching: Applying cognitive science to promote student learning*. New York: McGraw-Hill.
- Fien, J. (2001). Educating for a sustainable future: Challenges for the twenty first century. In J. Campbell (Ed.), *Creating our common future: Educating for unity in diversity* (pp.122 – 142.). New York: UNESCO Publishing/ Berghahn Books.
- Fish, S. (1980). *Is there a text in the class? The authority of interpretive communities*. Cambridge, Mass: Harvard University press.
- Flack, J. D. (1997). *From the land of enchantment: Creative teaching with fairy tale*. Eaglewood, CO: Teacher Ideas Press.
- Foster, T.C. (2003). *How to read literature like a professor: A lively and entertaining guide to reading between the lines*. New York: Harper Collins.
- Freund, E. (1987). *The return of the reader: Reader-response criticism*. New York: Methuen.

- Geersten, H.R. (2003). Rethinking thinking about higher-level thinking. *Teaching Sociology*, 31(1), 1-19. Retrieved April 29, 2006, from <http://www.jstor.org/>
- Gilman, S.L. (2000). *The fortunes of the humanities*. Stanford, CA: Stanford University Press.
- Goldenberg, J., Mazursky, D., & Solomon, S. (1999). Creative sparks. *Science*, 285 (5433), 1495-1496. Retrieved April 1, 2006, from <http://www.jstor.org/>
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ for character, health and lifelong achievement*. New York: Bantam Books.
- Good, T.L., & Brophy, J.E. (1997). *Looking into classrooms* (7<sup>th</sup> ed.). New York: Longman.
- Gould, W. T.S. (1993). *People and education in the third world*. New York: Longman Scientific and Technical.
- Griffith, K. (1999). Hamlet meets Frankenstein: Exploring the possible worlds of classic literature. In C. Edgar, & R. Padgett (Eds.), *Classics in the classroom: using great literature to teach writing* (pp. 111-119). New York: Teachers and Writers Collaborative.
- Guerin, W.L., Labor, E., Morgan, L., Reesman, J.C., & Willingham, J.R. (2005). *A handbook of critical approaches to literature* (5<sup>th</sup> ed.). New York: Oxford University Press.
- Guthrie, E.R. (1930). Conditioning as a principle of learning. *Psychological Review*, 37, 412-428.
- Guthrie, E.R. (1934). Reward and punishment. *Psychological Review*, 41, 450-460.
- Guthrie, E.R. (1952). *The psychology of learning*. (2<sup>nd</sup> ed.). New York: Harper and Row.
- Guthrie, E.R., & Horton, G. (1946). *Cats in a puzzle box*. New York: Rinehart Press.
- Halpern, D.F. (1996). *Thought and knowledge: An introduction to critical thinking* (3<sup>rd</sup> ed.). New Jersey: Lawrence Erlbaum.
- Halpern, D.F. (2003). Applying the science of learning to the university and beyond: Teaching for long-term retention and transfer- suggested reading. *Change*. Retrieved November 10, 2006, from [http://www.findarticles.com/p/articles/mi\\_m1254/is\\_4\\_35/ai\\_104209669](http://www.findarticles.com/p/articles/mi_m1254/is_4_35/ai_104209669)

- Hamilton, C. (2003). A cognitive grammar of 'Hospital Barge' by Wilfred Owen. In J. Garvins, & G. Steen (Eds.), *Cognitive poetics in practice* (pp.55 -66 ). London: Routledge.
- Hamilton, C. (2002). From Iser to Turner and beyond: Reception theory meets cognitive criticism. *Style*. Retrieved November 15, 2006, from [http://www.findarticles.com/p/articles/mi\\_m2342/is\\_4\\_36/ai\\_98167917](http://www.findarticles.com/p/articles/mi_m2342/is_4_36/ai_98167917)
- Henry, J. (1994). *Teaching through projects*. London: Kogan Page.
- Hirvela, A. (2004). *Connecting reading and writing in second language writing instruction*. USA: The University of Michigan Press.
- Hopkins, C. (2001). *Thinking about texts: An introduction to English studies*. New York: Palgrave.
- Hyland, K. (2004). *Genre and second language writing*. USA: The University of Michigan Press.
- Iser, W. (1987). *The Implied reader: Patterns of communication in prose fiction from Bunyan to Becket*. Baltimore: The John Hopkins University press.
- Jackson, T. (2003). Questioning interdisciplinary: Cognitive science, evolutionary psychology, and literary criticism. *Poetics Today*, 21 (2), 191-205. Retrieved March 14, 2006, from [http://muse.jhu.edu/journals/poetics\\_today/](http://muse.jhu.edu/journals/poetics_today/)
- Jauss, H.R., (1982). *Towards an aesthetic of reception*. Minneapolis: University of Minnesota Press.
- Jeffery, B., & Woods, P. (2003). *The creative school: A framework for success, quality and effectiveness*. New York: Routledge Falmer.
- Johnson, E.B. (2002). *Contextual teaching and learning: what it is and why it's here to stay*. Thousands oaks, CA: Corwin Press.
- Joubert, M.M. (2001) The art of creative teaching NACCCE and beyond, In A. Craft, B. Jeffrey, & M. Leibling (Eds.), *Creativity in education* (pp.17 -34). London: Continuum.
- Joyce, B., & Weil, M. (1996). *Models of teaching* (5<sup>th</sup> ed.). London: Allyn and Bacon.
- King, L. (2003). ***Test Your Creative Thinking: Enhance Your Lateral Thinking; Learn to Think Outside the Box***. London: Kogan Page.

- Klein, S. B. (1991). *Learning: Principles and applications* (3<sup>rd</sup> ed.). New York: McGraw-Hill.
- Knapp, J.V. (2004). Current conversations in the teaching of college level literature. *Style*. Retrieved November 11, 2006, from [http://www.findarticles.com/p/articles/mi\\_m2342/is\\_1\\_38/ai\\_n13774332](http://www.findarticles.com/p/articles/mi_m2342/is_1_38/ai_n13774332)
- Kuhn, D. & Dean, D. jr. (2004). *Metacognition: A bridge between cognitive psychology and educational practice*. *Theory into Practice*. Retrieved November 3, 2006, from [http://www.findarticles.com/p/articles/mi\\_m0NQM/is\\_4\\_43/ai\\_n8686064](http://www.findarticles.com/p/articles/mi_m0NQM/is_4_43/ai_n8686064)
- Lahey, B.B. (2004). *Psychology: An introduction* (8<sup>th</sup> ed.). New York: McGraw-Hill.
- Leach, S. (1992). *Shakespeare in the classroom: What's the matter?*. Philadelphia: Open University Press.
- Leahey, T. H., & Harris, R.J. (1985). *Human learning*. New Jersey: Prentice-Hall.
- Lewis, A., & Smith, D. (1993). Defining higher order thinking. *Theory into Practice*, 32 (3), 131-137. Retrieved March 23, 2006, from <http://www.jstor.org/>
- Lipman, M. (2003). *Thinking in education* (2<sup>nd</sup> ed.). Cambridge: Cambridge University Press.
- Lindblom, K. (2003). Teaching English in the world: Literature and public discourse in times of global unrest. *The English Journal*, 39(1), 96-99. Retrieved December 7, 2006, from <http://www.jstor.org/>
- Lovell, R. B. (1984). *Adult learning*. London: Croom Helm.
- Lucas, R.W. (2003). *The creative training idea book: Inspired tips and techniques for engaging and effective learning*. New York: Amacom.
- Lumsdaine, E., & Lumsdaine, M. (1995). *Creative problem solving: Thinking skills for a changing world*. (International ed.). New York: McGraw-Hill.
- Lynn, S. (1994). *Texts and contexts: Writing about literature with critical theory*. New York: HarperCollins.
- Matlin, M.W. (1989). *Cognition* (2<sup>nd</sup> ed.). New York: Harcourt Brace Jovanovich.

- McCrudden, M.T., Schraw, G., & Kambe, G. (2005). The effect of relevance instructions on reading time and learning. *Journal of Educational Psychology*, 97(1), 88-102.
- McGuinness, C. (1999). *From thinking skill to thinking classrooms*. Retrieved September 1, 2006 from, <http://www.dfes.gov.uk/research/data/uploadfiles/RB115.doc>
- Meskin, A., & Weinberg, J.M. (2003). Emotions, fiction, and cognitive architecture. *British Journal of Aesthetics*, 43 (1), 18-34. Retrieved November 10, 2006, from <http://bjaesthetics.oxfordjournals.org/>
- Michalko, M.(1994). Creative thinking technique: Lotus blossom. Retrieved December 5, 2006, from <http://www.innovationtools.com/Articles/ArticlesDetails.asp?a=160>.
- Miller, J.H. (2002). *On literature*. New York: Routledge.
- Miller, G.A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.
- Miller, G.A., Galanter, E., & Pribram, K.H. (1960). *Plans and structure of behavior*. New York: Holt, Rinehart & Winston.
- Moore, J.N. (2002). Practicing poetry: Teaching to learn and learning to teach. *The English Journal*, 91 (3), 44-50. Retrieved December 10, 2006, from [http:// www. Jstor.org/](http://www.Jstor.org/)
- Murdock, M., & Keller-Mathers, S. (2002). *Teaching for creativity: Where there's a will, there's a way*. Retrieved September 29, 2006, from <http://www.buffalostate.edu/orgs/cbir/cbir-r2.asp?rec=2400>
- Murfin, R.C. (Ed.). (1989). Reader response criticism and *Heart of Darkness*. In R.C. Murfin (Ed.), *Joseph Conrad: Heart of Darkness: A case study in contemporary criticism* (pp.139 -147). New York: St. Martin.
- Newcomb, L.H., & Trefz, M.K. (1987). Levels of cognition of students tests and assignments in the College of agriculture at the Ohio State University. *National Association of College Teachers of Agriculture Journal*, 31(2), 26-30.
- Ormrod, J. E. (2000). *Educational psychology: Developing learners* (3rd ed.). New Jersey: Prentice-Hall.
- Osborn, A. F. (1963). *Applied Imagination* (3<sup>rd</sup> ed.). New York: Charles Scribner's Sons.

- Palmer, C., & den Hartog, D. (2005). Teaching English literature in 2004: An Australian comment. *The Cambridge Quarterly*, 34, 285-295. Retrieved November 10, 2006, from <http://camqtlly.oxfordjournals.org/>
- Pavlov, I.P. (1927). *Conditioned reflexes*. New York: Dover.
- Peacock, C. (1990). *Classroom skills in English teaching: A self-appraisal framework*. London: Routledge.
- Peeck, J. (1993). Increasing picture effects in learning from illustrated text. *Learning and Instruction*. 3, 227-238.
- Perkins, D.N. (1988). Creativity and the quest for mechanism, In R. J. Sternberg, & E.D. Smith (Eds.), *The psychology of human thought* (pp. 309-336). New York: Cambridge University Press.
- Piaget, J. (1928). *Judgment and reasoning in the child*. (M. Warden, Trans.). New York: Harcourt Brace.
- Piaget, J. (1952). *The origins of intelligence in children*. (M. Cook, Trans.). New York: Norton.
- Piaget, J. (1959). *The language and thought of the child*. (3<sup>rd</sup> ed. Gabian, Trans.). London: Routledge & Kegan Paul
- Piaget, J. (1970). Piaget's theory. In P.H. Mussen (Ed.), *Carmichael's manual of psychology*. New York: Willey.
- Piaget, J. (1980). *Adaptation and intelligence: organic selection and phenocopy*. (S. Easmes, Trans.). Chicago: University of Chicago Press.
- Stockwell, P. (2002). *Cognitive poetics: An introduction*. London: Routledge.
- Phe, G.D. (2001). Problem-Solving instruction and problem solving transfer: The correspondence issue. *Journal of Educational Psychology*, 93(3), 571-578.
- Probst, R. E. (1994). Reader-response theory and English curriculum. *The English Journal*. 83(3), 37-44. Retrieved December 20, 2006, from <http://www.jstor.org/>
- Rao, D.B. (1997) *Education for the 21<sup>st</sup> century*. New Delhi: Discovery.
- Rao, N. P. (1996). *Education and human resource management*. New Delhi: APH.
- Reed, S. K. (2000). *Cognition* (5<sup>th</sup> ed.). USA: Wadsworth.

- Restak, R.M., M.D. (1988). *The Mind*. London: Bantam Books.
- Richards, I. A.(1924). *Principles of literary criticism*. New York: Routledge.
- Ricardson, A. & Steen, F.F. (2002). Literature and cognitive revolution: An introduction. *Poetics Today*, 23, pp.1-8. Retrieved October 6, 2006, from <http://poeticstoday.dukejournals.org/>
- Rivkin, J., & Ryan, M. (2002). *Literary Theory: An Introduction* (Rev. ed.). Massachusetts: Blackwell.
- Rosenblatt, L.M. (1978). *The reader, the text, the poem, the transactional theory of the literary work*. Illinois : Southern Illinois University Press.
- Rosslyn, F. (2005) Literature for the masses: The English literature degree in 2004. *The Cambridge Quarterly*, 34(1), 313-322. Retrieved October 5, 2006, from [http:// camqtly.oxfordjournals.org/](http://camqtly.oxfordjournals.org/)
- Ruggiero, V. R. (1988). *Teaching thinking across the curriculum*. New York: Harper and Row.
- Rumelhart, D., & McClelland, J. (Eds.). (1986). *Parallel distributed processing: Explorations in the microstructure of cognition*. Cambridge, MA: MIT Press.
- Ryan, M. (2004). *Literary theory: A practical introduction* (2<sup>nd</sup> ed.). Massachusetts: Blackwell.
- Saadawi, N.E. (2001). Presentation by Nawal El Saadawi: President's Forum, M/MLA Annual Convention, November 4, 1999. *The journal of the Midwest Modern Language Association*, 33(3), 34-39. Retrieved April 2, 2006 from <http://www.jstor.org/>
- Saaty, T.L. (2001). *Creative thinking, problem solving and decision making*. Pittsburgh, USA: RWS Publications.
- Safran, L. (2001). Creativity as 'Mindful Learning': A case from learner-led home-based education. In A. Craft, B. Jeffrey, & M. Leibling, *Creativity in Education* (pp.80 -94). London: Continuum.
- Sawyer, R.K. (2000). Improvisation and the creative process: Dewey, Collingwood, and the aesthetics of spontaneity. *The Journal of Aesthetics and Art Criticism*, 58 (2), 149-161. Retrieved April 5, 2006, from <http://www.jstor.org/>

- Schmidt, T., Goforth, E., & Drew, K. (1975). Creative dramatics and creativity: An experimental study. *Educational Theatre Journal*, 27 (1), 111-114. Retrieved April 1, 2006, from <http://www.jstor.org/>
- Schraw, G. (2000). Reader beliefs and meaning construction in narrative text. *Journal of Educational Psychology*, 92 (1), 96-106.
- Selden, R. (1989). *Practicing theory and reading literature: An introduction*. London: Harvest Wheat Sheaf.
- Semino, E. (2003). Possible worlds and mental spaces in Hemmingway's 'A very short story'. In J. Garvins, & G. Steen, *Cognitive poetics in practice* (pp. 83- 98). London: Routledge.
- Shaffer-Koros, C. M., & Reppy, J. M. (1999). *Explorations in world literature: Readings to enhance academic skills*. New York: Cambridge University Press.
- Showalter, E. (2004). *Teaching Literature*. Oxford: Blackwell. (Original work published 2003)
- Simister, J. (2004). To think or not to think: A preliminary investigation into the effects of teaching thinking. *Improving Schools*, 7 (3), 243-254. Retrieved August 8, 2006, from <http://imp.sagepub.com/>
- Skinner, B. F. (1938). *Behaviour of organism*. Englewood Cliffs, NJ: Prentice Hall.
- Skinner, B. F. (1957). *Verbal behaviour*. Englewood Cliffs, NJ: Prentice Hall.
- Skinner, B. F. (1969). *Contingencies of reinforcement*. Englewood Cliffs, NJ: Prentice Hall.
- Skinner, B. F. (1972). *Beyond freedom and dignity*. New York: Bantam.
- Skinner, B. F. (1974). *About behaviourism*. New York: Knopf.
- Solso, R.L. (2004). *Cognitive psychology* (6<sup>th</sup> ed. /1<sup>st</sup> Indian rept.). Delhi: Pearson Education. (Original work published 2001)
- Sonjae, A. (n.d.) *How should we be teaching English literature*. Retrieved August 24, 2006, from <http://www.sogang.ac.kr/~anthony/TeachLit.htm>.
- Steen, G. (2003). 'Love stories': Cognitive scenarios in love poetry. In J. Garvins, & G. Steen, *Cognitive poetics in practice* (pp.67 -82). London: Routledge.

- Steen, G. & Gavins, J. (2002). Contextualizing cognitive poetics. In J. Garvins, & G. Steen, *Cognitive poetics in practice* (pp.1-12). London: Routledge.
- Stern, L. (1985). *The structure and strategies of human memory*. Homewood, IL: The Dorsey Press.
- Sternberg, R.J. (2001). *Psychology: In search of the human mind* (3<sup>rd</sup> ed.). London: Harcourt College.
- Stockwell, P. (2002). *Cognitive poetics: An introduction*. London: Routledge.
- Thorndyke, E.L. (1965). *Primal intelligence (1911)*. New York: Harper Press.
- Thorndyke, E.L. (1968). *Human learning (1928-1929)*. New York: Johnson Reprint Corp.
- Tierney, R.J., Readence, J.E., & Dishner, E.K. (1995). *Reading strategies and practices: A compendium* (4<sup>th</sup> ed.). London: Allyn and Bacon.
- Todd, S.M., & Shinzato, S. (1999). Thinking for the future: Developing higher –level thinking and creativity for students in Japan- and elsewhere: *Childhood Education*, 75(6), 342-345.
- Torff, B. (2003). Developmental changes in teachers' use of higher order thinking and content knowledge. *Journal of Educational Psychology*, 95 (3), 563-569.
- Tuckman, B.W. (1999). *Conducting Educational Research* (5<sup>th</sup> ed.). Belmont CA: Wadsworth/Thomson Learning.
- Turner, M. (1987). *Death is the mother of beauty: Mind, metaphor, criticism*. Chicago: Chicago UP.
- Turner, M. (1991). *Reading minds: The study of English in the age of cognitive science*. Princeton: Princeton UP.
- Underbakke, M., Borg, J.M., & Peterson, D. (1993). Researching and developing the knowledge base for teaching higher order thinking. *Theory into Practice*, 32 (3), 138-146. Retrieved March 24, 2006, from <http://www.jstor.org/>
- Vinacke, W.E. (1974). *The psychology of thinking* (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Vinacke, W.E. (2006). Creative thinking. Retrieved October 3, 2006, from <http://www.search.eb.com/dday/print?articleId=108663&fullArticle=true&tocId=91086>

- Vygotsky, L.S. (1962). *Thought and language*. E. Haufmann & G. Vakar, Eds. & Trans.). Cambridge: MIT Press.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L.S. (1997). *Educational psychology*. Boca Raton, FL: St. Lucie Press.
- Wagner, M. (2005). Teaching humanities in new ways- and teaching new humanities: *Humanist*. Retrieved May 23, 2006, from [http://www.findarticles.com/p/articles/mi\\_m1374/is\\_3-65/ai\\_n14835/447](http://www.findarticles.com/p/articles/mi_m1374/is_3-65/ai_n14835/447)
- Watson, J. (1930). *Behaviourism*. New York: Norton.
- Wallace, G. (1926). *The art of thought*. London: Cape.
- Weber, J.J. (1996). Towards contextualized stylistics: An overview. In J. J. Weber (Ed.), *The Stylistic Reader: From Roman Jakobson to the Present* (pp.1- 8). New York: Arnold.
- Weimer, M. (2003). Focus on learning: Transform teaching. *Change*. Retrieved November 10, 2006 from [http://www.findarticles.com/p/articles/mi\\_m1254/is\\_5\\_35/ai\\_108008322](http://www.findarticles.com/p/articles/mi_m1254/is_5_35/ai_108008322)
- Wertheimer, M. (1959). *Productive thinking*. (Enlarged ed.). New York: Harper & Row.
- Winne, P.H., & Marx, R.W. (1982). Students' and teachers' views of thinking processes for classroom learning. *The Elementary School Journal*, 82 (5), 492-518. Retrieved March 24, 2006, from <http://www.jstor.org/>
- Woods, P., & Jeffrey, B. (2003). *The creative school: A framework for success, quality and effectiveness*. London: Routledge.
- Zima, P.V. (2002). *Deconstruction and critical theory*. (R. Emig, Trans.). New York: Continuum. (Original work published 1994)

## **APPENDICES**

## **Appendix A**

Subject: QUESTIONNAIRE FOR CHAIRPERSONS

Dear Colleague,

I am a doctoral candidate in the Faculty of Advanced Integrated Studies and Research, National University of Modern Languages. I am working on the research project: **Developing Creative Thinking: A Cognitive Approach to the Teaching of English Literature**. The purpose of my study is to devise a cognitive teaching model which can help develop students' creative thinking and thus, enable them to meet the challenges of the twenty first century.

I am requesting you please to fill in the enclosed questionnaire for teachers and help me get your students fill in the questionnaire for students. These questionnaires are the part of my research. By means of these questionnaires I am interested in obtaining your views about different aspects related to the study. There are no right or wrong answers. Therefore, you are requested to be as true as possible, because it is 'your' opinion, which is important for me. In addition to that, names of teachers and students will not be identified in my study. You are requested to tick (✓) one of the options.

I deeply appreciate your cooperation. Without you and the cooperation of your students I will not be able to conduct my research, which hopefully will shed light on ways to improve methods of teaching literature at Master's level.

If you have any further queries, please feel free to call me at 051-9257983 or 0300-9557368.

I look forward to having your positive response.  
Thank You

Yours sincerely

**Munazza Yaqoob**  
**Ph.D Researcher**  
**National University of Modern Languages**  
**Islamabad**

## QUESTIONNAIRE FOR CHAIRPERSONS

S.No	Statements	SA	A	UNC	SDA	DA
1.	Comprehensive lectures are delivered in the class					
2.	Interpretations of critics are provided to the students					
3.	All relevant information is imparted in the class by teachers					
4.	All prescribed syllabus is covered in the class					
5.	Teacher's lectures are noted down in detail					
6.	Issues of practical world are related with teaching of literature					
7.	Students are encouraged to do assignments on topics other than the ones related to examination					
8.	Visual aids are used to assist teaching					
9.	Students are taught skills to organize material and information					
10.	Discussions, brain storming sessions, and seminars are arranged in the class					
11.	Collaboration and cooperation among students is encouraged					
12.	Students are engaged in innovative activities such as dramatizing poems and short stories					
13.	Students' personal responses to the text are appreciated					
14.	The contents and the form of a text are emphasized by teachers					
15.	Students are provided guidance by the teachers to locate and process relevant information					
16.	Use of electronic communication among teachers and students is encouraged					

SA: Strongly Agreed

A: Agreed

UNC: Uncertain

SDA: Strongly Disagreed

DA: Disagreed

## **Appendix B**

Subject: QUESTIONNAIRE FOR TEACHERS

Dear Colleague,

I am a doctoral candidate in the Faculty of Advanced Integrated Studies and Research, National University of Modern Languages. I am working on the research project: **Developing Creative Thinking: A Cognitive Approach to the Teaching of English Literature**. The purpose of my study is to devise a cognitive teaching model which can help develop students' creative thinking and thus, enable them to meet the challenges of the twenty first century.

I am requesting you please to fill in the enclosed questionnaire for teachers and help me get your students fill in the questionnaire for students. These questionnaires are the part of my research. By means of these questionnaires I am interested in obtaining your views about different aspects related to the study. There are no rights or wrong answers. Therefore, you are requested to be as true as possible, because it is 'your' opinion, which is important for me. In addition to that, names of teachers and students will not be identified in my study. You are requested to tick (✓) one of the options.

I deeply appreciate your cooperation. Without you and the cooperation of your students I will not be able to conduct my research, which hopefully will shed light on ways to improve methods of teaching literature at master's level.

If you have any further queries, please feel free to call me at 051-9257983 or 0300-9557368.

I look forward to having your positive response.  
Thank You

Yours sincerely

**Munazza Yaqoob**  
**Ph.D Researcher**  
**National University of Modern Languages**  
**Islamabad**

## QUESTIONNAIRE FOR TEACHERS

S.No	Statements	SA	A	UNC	SDA	DA
1.	Literature is taught as a source of aesthetic pleasure					
2.	Literature is taught as a source of moral instruction					
3.	Literature is taught as a tool to learn problem solving skills					
4.	Students are facilitated to focus on the use of language in the text					
5.	Students are made to rely on interpretations of critics					
6.	Students are encouraged to generate novel and creative interpretations of texts					
7.	All prescribed syllabus is covered in the class					
8.	Learners rely on key books and notes					
9.	Teaching of literature is related with the practical world					
10.	Students are taught the techniques to organize material and information					
11.	Students are encouraged to do assignments on topics other than the ones related to exams					
12.	Students are encouraged to work on projects and presentations					
13.	Literary texts are related with students' personal life and experiences					
14.	Literature is related with other subject areas					
15.	Issues in literary texts are presented as problems for students to solve					
16.	Students are facilitated to work in groups and pairs					
17.	Discussions and brainstorming sessions are arranged in the class					
18.	Students are encouraged to make multiple interpretations of a literary text					
19.	Students are asked questions that encourage them to investigate and infer					
20.	Students are motivated to locate similarities and differences between different texts					
21.	Students are motivated to predict the theme of a poem or novel before the teacher gives a lecture on it					

22.	More importance is assigned to teaching the content of the text					
23.	Both the content and the form of a text are emphasized					
24.	Teaching is assisted with visual aids					
25.	Students are encouraged to use webquests to find information					

- SA: Strongly Agreed  
A: Agreed  
UNC: Uncertain  
SDA: Strongly Disagreed  
DA: Disagreed

## Appendix C

Subject: QUESTIONNAIRE FOR STUDENTS

Dear Student,

I am a doctoral candidate in the Faculty of Advanced Integrated Studies and Research, National University of Modern Languages. I am working on the research project: **Developing Creative Thinking: A Cognitive Approach to the Teaching of English Literature**. The purpose of my study is to devise a cognitive which can help develop students' creative thinking and thus enable them to meet the challenges of the twenty first century.

I am requesting you please to fill in the enclosed questionnaire for students. This questionnaire is the part of my research. By means of this questionnaire I am interested in obtaining your views about different aspects related to the study. There are no right or wrong answers. Therefore, you are requested to be as true as possible, because it is 'your' opinion, which is important for me. In addition to that, names of teachers and students will not be identified in my study. You are requested to tick (✓) one of the option.

I deeply appreciate your cooperation. Without your cooperation I will not be able to conduct my research, which hopefully will shed light on ways to improve methods of teaching literature at Master's level.

If you have any further queries, please feel free to call me at 051-9257983 or 0300-9557368.

I look forward to having your positive response.  
Thank You

Yours sincerely

**Munazza Yaqoob**  
**Ph.D Researcher**  
**National University of Modern Languages**  
**Islamabad**

## QUESTIONNAIRE FOR STUDENTS

S.No	Statements	SA	A	UNC	SDA	DA
1.	Students rely on the interpretations of critics					
2.	Students are encouraged to disagree with the interpretations of critics					
3.	Students are encouraged to generate novel and creative interpretations of texts					
4.	Students adequately understand the materials and concepts presented to them in the class					
5.	Students are desired to think on whatever is imparted to them					
6.	Students are facilitated to locate and process relevant information from the available resources					
7.	Students are encouraged to use internet to find information					
8.	Literary texts are related with the issues and problems of the practical world					
9.	Students are taught the techniques to organize material and information					
10.	Students are assigned project works and research assignments					
11.	Classroom seminars and students' presentations are organized					
12.	Videos, documentaries & other visuals are used to teach texts					
13.	Literary texts are related with students' personal life an experiences					
14.	Literature is related with other subject areas					
15.	Students are helped to apply knowledge and understanding to new situations in various contexts					
16.	Students are encouraged to work in groups and pairs					
17.	Discussions and brain storming sessions are arranged in the class					
18.	Students are assisted in using their prior knowledge to make meaning of a text					
19.	Students are encouraged to use graphics and visuals to organize information					
20.	Students are engaged in novel activities such as making additions to literary texts					
21.	Teachers involve students in activities such as					

	remaking or reforming characters and situations					
22.	Students are motivated to predict the meaning of literary texts before the teacher gives a lecture on it					
23.	Students are engaged in writing journals and response essays					
24.	Students are encouraged to conduct interviews and surveys					
25.	Comprehensive lectures are given on all texts					

- SA: Strongly Agreed  
A: Agreed  
UNC: Uncertain  
SDA: Strongly Disagreed  
DA: Disagreed

## Appendix D

### PRE-TEST

Total Marks: 100

Time allowed: 04 Hours

**Note: Attempt all the questions.**

**Q. 1:** Refer to *Paradise Lost* Book IX and justify Adam's act of eating the forbidden fruit.

Follow the instructions and organize your response: (20)

<b>Problem\ Issue</b>	Refer to the question given
<b>Selecting relevant data</b>	List the arguments Eve gave to convince Adam to eat the fruit list arguments Adam gave to justify his act of eating the fruit
<b>Generating Solutions for the problem</b>	Infer and extract the possible causes from the arguments of Adam and Eve which in your opinion led Adam to eat the fruit
<b>Solution most appropriately applicable</b>	Formulate your arguments to justify Adam's act of eating the fruit

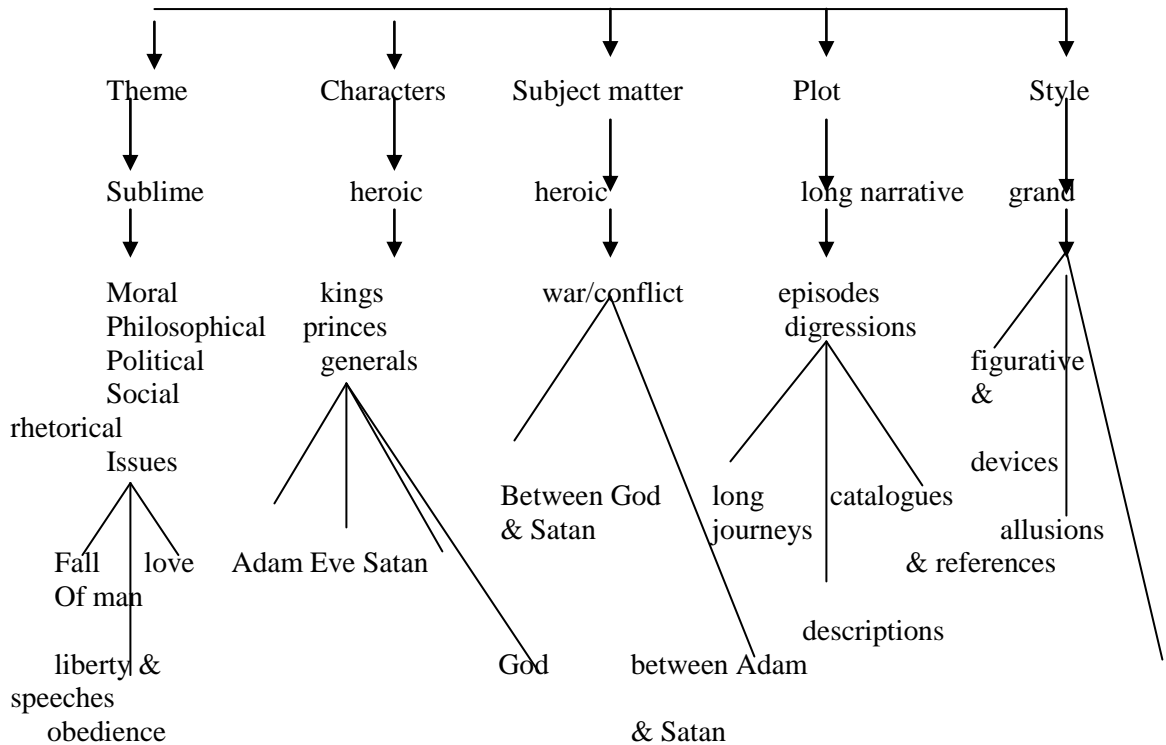
**Q.2.a:** Who in your opinion is the hero of *Paradise Lost*: Adam or Satan? Prepare notes of your arguments in the following two columns: (20)

<b>Adam</b>	<b>Satan</b>

**Q.2.b:** Consult your notes and conclude the discussion adding your response to the topic.

**Q.3:** Consult the information given in the advance organizer given below and write five arguments supporting each of the statements that follow: (20)

## EPIC



- i. *Paradise Lost* is a classical epic
- ii. *Paradise Lost* violates classical epic conventions
- iii. *Paradise Lost* is a combination of classical and romantic epic

**Q.4:** Work in groups of four and rewrite the story of *Paradise Lost* book IX in about 300 words incorporating the ideas given in the checklist below: (20)

<b>Minimize the role of Eve</b>
<b>Extend the role of Satan till the end of the poem</b>
<b>Subtract the dialogues between Adam and Eve before the fall</b>
<b>Add the character of Gabriel in the temptation scene</b>
<b>Reverse the effect of the fruit</b>

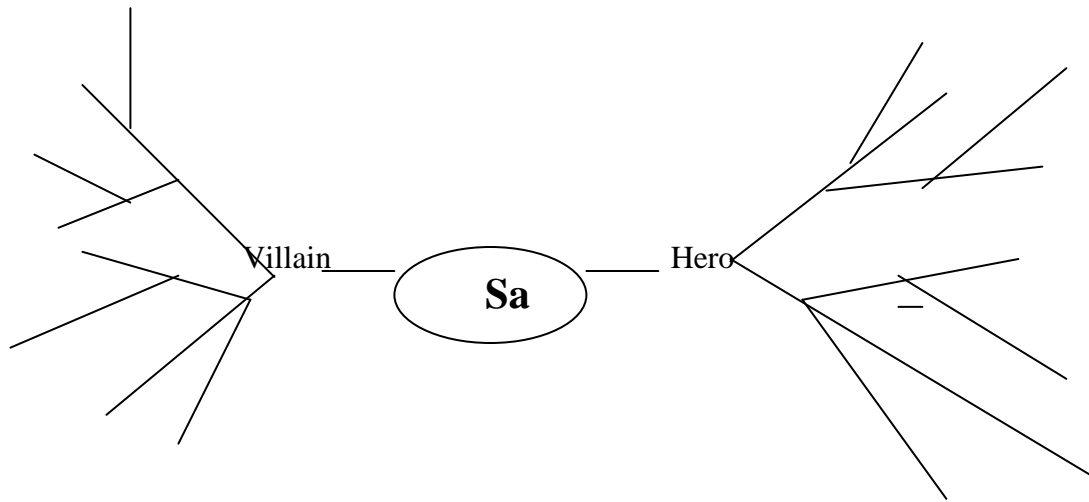
**Q.5.** Satan seeks revenge for his “injur’d merit” in *Paradise Lost*. Did you ever observe or hear about any one in your real life seeking revenge for some personal cause. Discuss in your group and briefly comment. (20)

# POSTTEST

Total marks: 100  
Time allowed: 04 Hours

**Note: Attempt all the questions.**

**Q.1.a:** Read Satan's speeches taken *Paradise Lost Book 1* and pick up relevant lines, phrases and words to complete the Mind Map given below: (20)



**b.** Work in pairs, consult your notes in the Mind Map and write your arguments for the following Discussion Web: (20)

No	Yes
<b>Satan is a hero</b>	

**Q.2:** Refer to *Paradise Lost* Book IX and justify Eve's act of eating the forbidden fruit. Follow the instruction and organize your response: (20)

<b>Problem/Issue</b>	Refer to the question given
<b>Collecting relevant data</b>	List the arguments Satan gave to convince Eve to eat the fruit  List the arguments Eve gave to justify her act of eating the fruit
<b>Generating solutions for the problem</b>	Infer and extract the possible causes which in your opinion led Eve to eat the fruit
<b>Applying most appropriate solution</b>	Give your arguments to justify Eve's act of eating the fruit

**Q.3:** Rewrite the consequences of the Fall incorporating the ideas given in the checklist below: (20)

<b>Change the setting from Eden to earth</b>
<b>Replace the character of Eve with Adam and that of Adam with Eve</b>
<b>Add the character of Satan playing the role of a friend</b>
<b>Adam and Eve's reaction to Satan</b>
<b>Change the ending of the story of book IX</b>

**Q.4:** It is generally said that love is blind; with reference to the famous love stories such as Anthony and Cleopatra, Romeo and Juliet, and Leila Majnoon discuss Adam's passions for Eve. (20)

**Q.5.** Suppose you are asked to stage the climax scene of the poem when Satan tempts Eve and Eve tempts Adam. How would you set the stage? Work in groups of four and describe your setting. (10)

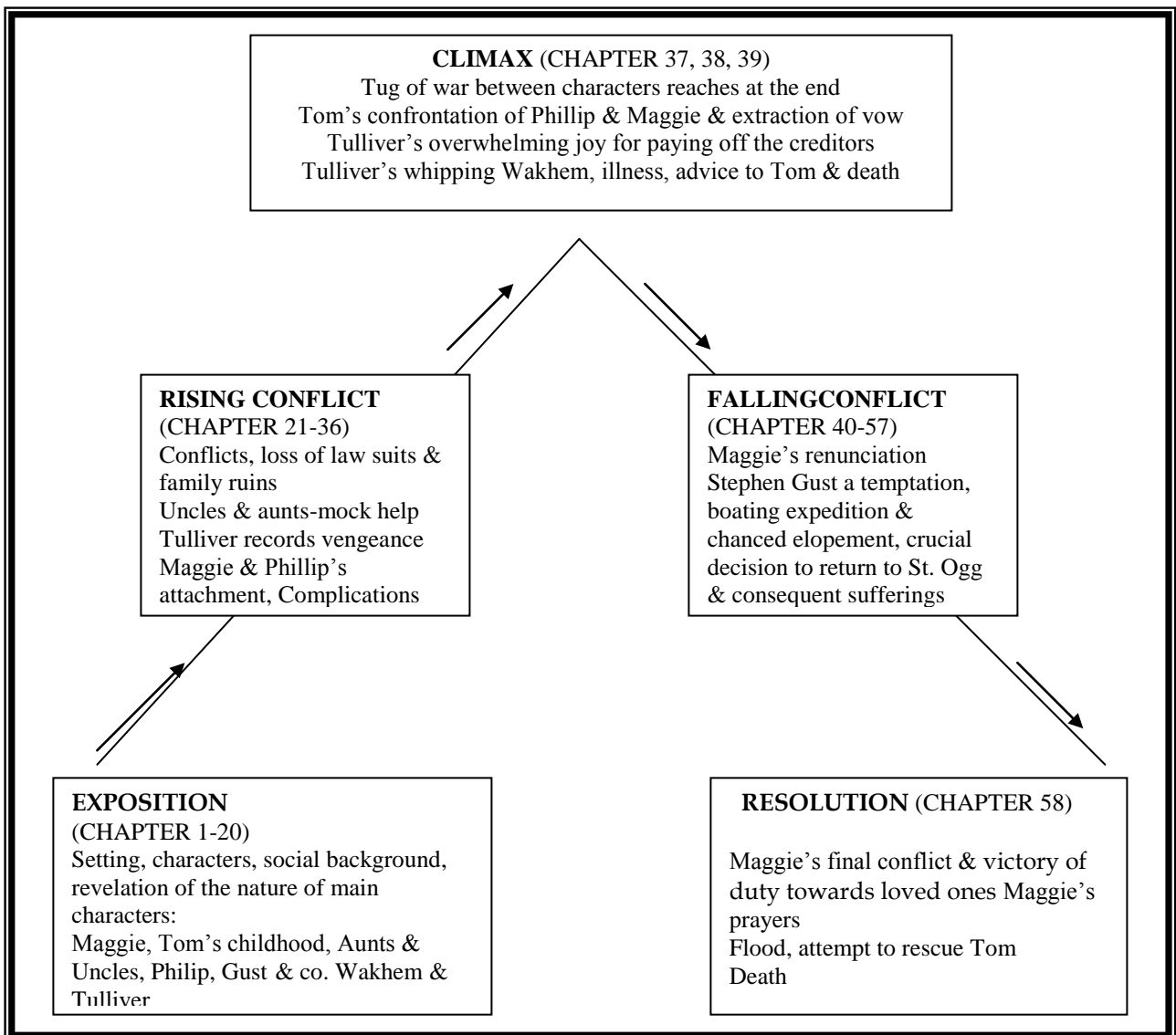
## Appendix E

### PRE-TEST

**Total Marks: 100**  
**Time Allowed: 04 Hours**

**Note: Attempt all the questions.**

**Q.1.** Read the following Advance Organizer carefully and write at least five arguments to support the following statements: (15)

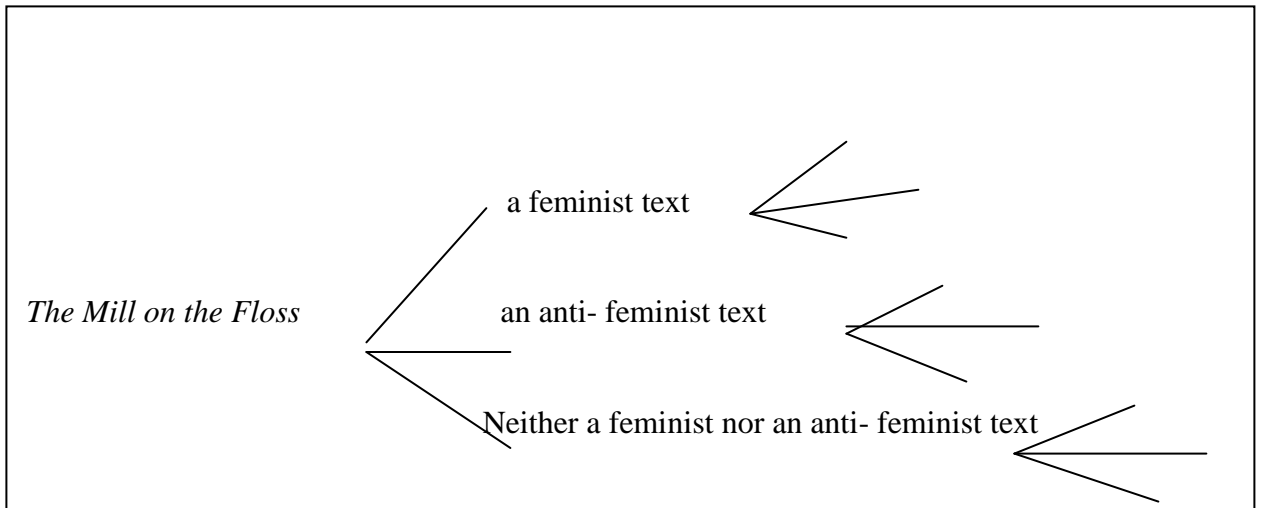


**STATEMENTS:**

- i. Stephen and Maggie episode is not fully treated.
- ii. Maggie’s reunion with her brother Tom in death was the only solution to her complicated problems.
- iii. The novel keeps our interest alive in spite of several defects in construction.

**Q.2.** Discuss the novel *The Mill on the Floss* according to following headings.

Write three arguments for each heading. (15)



**Q.3:** Why did Maggie elope with Stephen Guest? Follow the instructions given in the table below and organize your response. 30

<b>Problem/ issue</b>	
<b>Collecting relevant data</b>	List main characteristics of Maggie’s nature Consider social and domestic environment Consider the nature of Maggie’s relation with Phillip
<b>Generating Solutions for the</b>	Infer possible causes from the characteristics of

<b>problem</b>	Maggie and the environment she was living in
<b>Solution most appropriately applicable</b>	Formulate your argument justifying or criticizing Maggie's elopement

Q.4: Work in groups of four and consider social and domestic life style of the postmodern society of today. Do you think placement of Maggie in today's society would more complicate her situation? 20

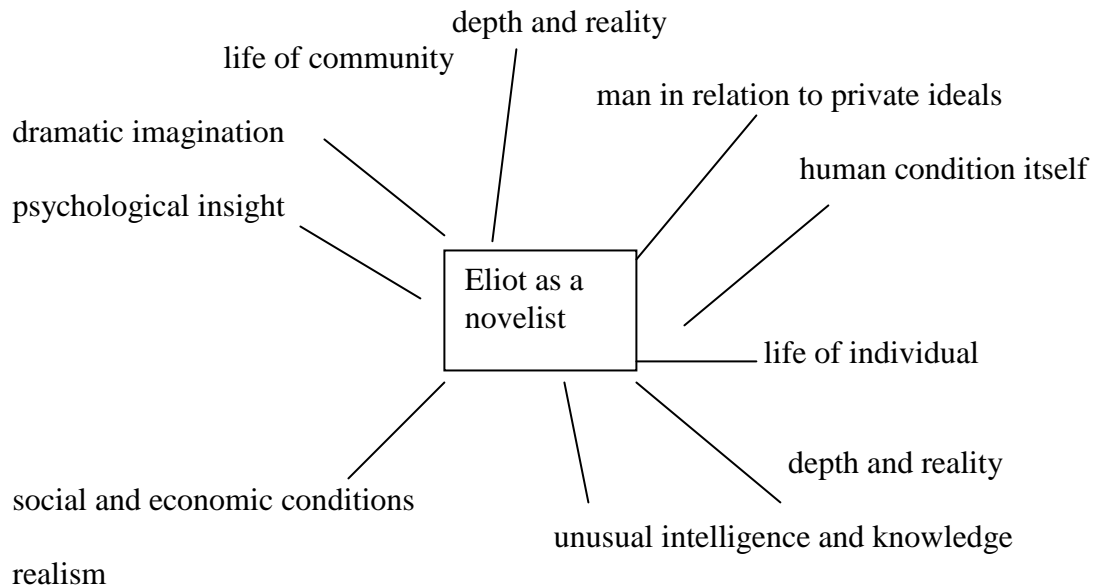
Q.5: If the character of Maggie is replaced with that of Lucy, how, do you think, the ending of the novel might be changed? 20

## POSTTEST

**Total Marks: 100**  
**Time Allowed: 04 Hours**

**Note: Attempt all the questions.**

**Q.1.** Read the information given in the web carefully and comment on the following statement: (20)



**STATEMENT:**

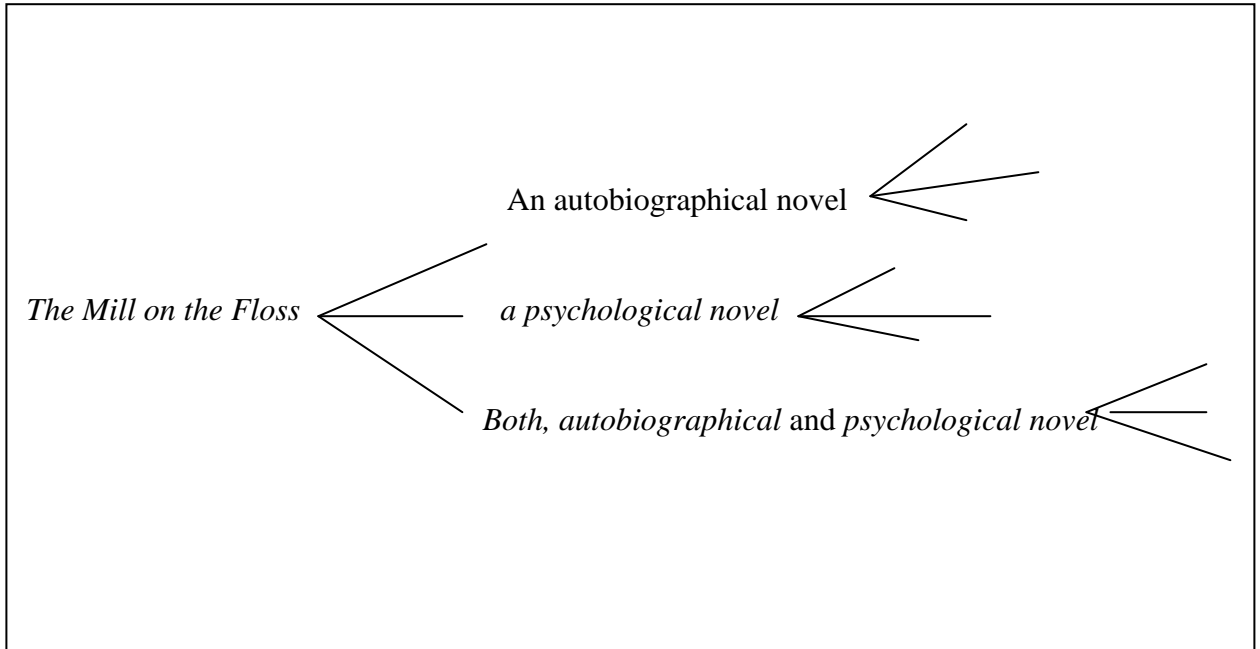
Eliot's vision of tragedy is profound.

**Q.2.** Why is Maggie's life so tragic? Consider the following prompters: (15)

- The struggle within her own divided self

- The clash between her own temperament and that of Tom
- The environment and the external events getting beyond her control

**Q.3.** Discuss the novel *The Mill on the Floss* according to following headings. Write three arguments for each heading. (15)



**Q.4 .** Discuss in pairs the story of the novel and complete the following discussion web. (10)

<b>YES</b>	<u><i>The Mill on the Floss</i> is a picture of contemporary society</u>	<b>NO</b>

Q.4: Do you think *The Mill on the Floss* like *Hamlet* and *Oedipus Rex* regards the contrast between will of individuals and their limitations as the cause of human tragedy? Discuss with your friend and write your viewpoint? (20)

Q.5: Work in groups of four and rewrite the ending of the novel in about 500 words. Follow the instructions given in the checklist below: (20)

1	Minimize Maggie's role
2	Extend the role of Dr. Ken
3	Subtract the flooding of the river Floss
4	Add Philip's character

## Appendix F

### LESSON PLAN NO.1

**Title of the Lesson Plan:** English Romanticism and Wordsworth

**Subject Area:** English Literature

**Level:** Master's of English

**Length:** six sessions (each session of one hour duration)

**Overview:** This lesson is designed to review English Romanticism (1798- 1832) and Romantic poetry. The students had already read a course on Renaissance, puritan and Eighteenth century poetry in their first semester. They had also taken a course on literary forms and movements. This lesson plan is designed to apply strategies and techniques in teaching literature that help nurture creative thinking in students of literature at Master's level. The strategies and techniques involved in the lessons include: Brainstorming, Making Connections and transference, Fraction or The Bird watching Method, Rehearsal and In-depth study, Discussion Web, Attribute Listing, Collaboration and cooperation, Project works, Response Essays, Visualization, Advance organizers, Prediction, Follow up Activities and Extension, etc.

**Purpose:** This lesson gives students an opportunity to practice some of the important strategies and techniques that enhance creative thinking.

**Concept:** This lesson is divided into six major sections to be conducted in six sessions with each session of one hour.

**Objectives:** Students will be able to:

- Discuss the main characteristics of Romanticism, French Revolution, Trends in Romantic poetry and Wordsworth as a romantic poet
- Organize information in the form of tables and flow charts
- Work in collaboration
- Write summary of the discussion

- Write response essay on romantic rebellion
- Collect information to record in their reading journal
- Prepare bibliographies
- Prepare presentations
- Generate personal opinions and responses

**Material:** Following items are required to conduct these lessons:

- White board and markers
- Transparencies with main events of Romanticism and French Revolution
- Handouts with information about Romanticism, French Revolution, and Wordsworth's life

### **First session of one hour duration**

**Lesson Objectives:** Students will be able to:

- Discuss the main characteristics of Romanticism
- Organize information in the form of tables and flow charts
- Work in collaboration
- Read for main ideas

**Procedure:**

- The lesson begins with students' discussion on literary and intellectual movements such as Renaissance, Reformation and Puritanism.
- The teacher distributes handouts taken from different books and websites on Romanticism and English Romantic poets among the students divided into groups. Each group consists of five students and receives handouts different from other groups. The students are asked to read for the main ideas and finish the reading task in fifteen minutes. The students locate the required information with the help of transparencies with the main topics shown to them while they are reading.
- The teacher organizes a brain storming session on Romantic period, its socio-political and literary trends. The ideas generated by the students are written on the white board.

- The students are asked to work in groups and organize the ideas generated during the brain storming session in the form of flow charts. The teacher examines the flow charts prepared by each group and asks them to exchange their flow charts with other groups.

## **Second session of one hour duration**

**Lesson Objectives:** Students will be able to:

- Discuss French Revolution
- Generate ideas
- Organize information in tables
- Write composition
- Work in collaboration

### **Procedure:**

- The teacher begins a brain storming session on French Revolution and its impact on English Romantic poets and poetry. Students are encouraged to generate ideas taken from their readings and give personal comments as well. The teacher writes down all the important ideas on the white board.
- The teacher asks students to organize the generated ideas and comments in a table of two columns; one column with ideas taken from their readings and second column with their personal views and comments.
- The teacher asks the students to work in pairs and prepare a composition of about 250 words on French Revolution and its impact on English Romantic poetry. The teacher encourages students to include their personal views in the composition. The students are asked to complete the task in twenty minutes.
- The students are asked to exchange the compositions with other pairs and add information or write their comments.

## **Third session of one hour duration**

**Lesson Objectives:** Students will be able to:

- Discuss the characteristics of Romantic poetry

- Work in collaboration
- Organize information in tables
- Give presentations
- Generate personal responses

**Procedure:**

- The teacher divides the students in groups. Each group consists of five students.
- The teacher distributes some excerpts from *The Preface to Lyrical Ballads* among the groups.
- The teacher asks the students to work in groups, read the excerpts, take notes relevant to the topics given in the table and complete the table as illustrated below:

<b>Subject matter</b>	
<b>Characters</b>	
<b>Language</b>	
<b>Poet</b>	
<b>Function of poetry</b>	
<b>Imagination</b>	

- The teacher arranges a discussion with students on the topics given and notes taken and encourages students to give their personal comments. If students desire the teacher may elaborate some topics or points under discussion.
- The teacher assigns tasks for the next session. The students are required to read about Augustan poetry or recall their discussion on it as they have read the course in their previous semester and prepare a group presentation drawing a comparison between Romantic and Augustan poetry. The students are given task to prepare four transparencies as explained below:
  - i. Comparison table on the following format:
  - ii. Summary of the information given in the table
  - iii. Personal response or comments on the discussion

CHARACTERISTICS OF AUGUSTAN POETRY	CHARACTERISTICS OF ROMANTIC POETRY

#### **Fourth session of one hour**

**Lesson Objectives:** Students will be able to:

- Give presentations
- Comments on other students' presentations
- Write response essays

#### **Procedure:**

- Students give their group presentation on the topic assigned to the in the previous session.
- Students are encouraged to comment at the end of each groups' presentation
- The teacher sums up the discussion
- The students are assigned to write a response essay on the Romantic Rebellion and the possibilities of the revival of Romanticism in twenty first century to be presented in the next session.

#### **Fifth session of one hour duration**

**Lesson Objectives:** Students will be able to:

- Discuss the possibilities of Romantic Revival in the twenty first century
- Write reading journal
- Generate personal opinions

**Procedure:**

- Each group exchanges its response essay with other groups and some more information or comments are added.
- The teacher organizes discussion among all the groups on topic of the response essays.
- The teacher sums up the discussion.
- Students are asked to record the main points of the discussion along with their commentary in their reading journal.
- The teacher asks students to read Wordsworth's biography and some of his lyrical ballads like 'Michael', 'Daffodils', 'We are Seven', Lucy Poems, 'Ruth', and 'Solitary Reaper' for discussion in the next session:

**Sixth session of one hour duration**

**Lesson Objectives:** Students will be able to:

- Work in collaboration
- Tell summaries
- Organize information in Discussion Web
- Discuss the characters in Lyrical Ballads
- Evaluate the accuracy of Wordsworth's observation and presentation
- Prepare bibliographies

**Procedure:**

- The teacher asks the students to tell the summary of the lyrical ballads they have read.
- Students are divided into groups. Each group consists of five students.
- All groups are assigned to discuss and prepare discussion webs as given below:

YES	NO
<u>Wordsworth's Poetry is autobiographical</u>	

- The teacher asks the students to share their observation or experience with people similar to the characters such as Michael, Ruth, the Reaper, and rural child or any other from Lyrical *Ballads* and evaluate accuracy in Wordsworth's characterization.
- Students are asked to prepare bibliographies on English Romanticism and Wordsworth. They are also asked to prepare lists of relevant websites.

## LESSON PLAN NO. 2

**Subject Area:** Literature

**Text:** *The Prelude* Book 1

**Length:** Thirteen sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Wordsworth's *The Prelude* book 1, critically and give a creative response to it. It also aims at helping students to become independent learners and work in collaboration as well. The activities and exercises in this lesson plan are graded according to Bloom's taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Annotated Reading
- Rehearsal
- Organizing Material
- Learning with Projects
- In-depth Study or Meaningful Learning

- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to:

- Critically analyze *The Prelude* Book 1
- Organize information
- Use tables and charts and other visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays

**Material:** Following items are required to conduct these lessons:

- White board
- Over head projector and transparencies
- Worksheets prepared by the teacher

## **Procedure:**

### **First session of one hour duration**

- The teacher writes the following topic on the white board and asks students to generate their opinions:

City Life is Better than Village Life

- The teacher invites students responses n Wordsworth's preference of nature to city life
- The teacher distributes worksheets 1(enclosed with) among the students
- Students complete activities 1a, 1b, and 1c in the Reviewing the text section f the worksheet.
- Students complete their task. The teacher draws the table of activity 1a and 1b on the white board, ask the students to consult their worksheets and give their suggestions to complete the tables. All students are encouraged to contribute and the teacher adds or deletes information after discussing with the students.
- Students are asked to complete the second part of the worksheet that is Shaping Interpretations and bring it in the next session for discussion.

### **Second session of one hour duration**

- Students are divided into groups and are asked to discuss the second section of their worksheets in groups.
- The teacher discusses each question of the second section with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.

### **Third session of one hour duration**

- The teacher asks the students to read the third section of the worksheet and organizes a brain storming session on the following:

Do you think Wordsworth's opinion about nature is convincing?

- Students' responses are written on white board and they are asked to conclude the discussion.
- Students are asked to work in groups of five and complete activity 3b in the Making Connections section of the worksheet.
- Students summarize the information in mind maps and share their summaries with other groups.
- The teacher concludes the discussion
- The teacher asks students to prepare a presentation on the activity given in the section four of the worksheet for the next session.

#### **Fourth session of one hour duration**

- All the students present their work in the class.
- The students are encouraged to comment on the presentations.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks students to record their comments on the first one hundred lines of *The Prelude* book 1 in their Reading Journal.

#### **Fifth session of one hour duration**

- The teacher distributes worksheet no. 2 among the students, asks them to work in pairs and complete the advance organizer in activity 1a given in section one of the worksheet that is Reviewing the Text.
- Once the students have completed their work, the teacher prepares the advance organizer on the white board with the information provided by the students.
- Students then prepare a summary of the information given in the advance organizer.
- After this the students work on the second activity that is 1b in groups of five.
- The teacher asks the groups to elaborate some of the phrases and words, adds to the information given by students and sums up the discussion.

- The teacher asks students to complete the second section of the worksheet 2 that is Shaping Interpretations for discussion in the next session.

#### **Sixth session of one hour duration**

- The teacher asks students to work in groups of five and discuss their interpretations.
- The teacher takes each question of the second section of the worksheet and asks each group to communicate its interpretations.
- Students' interpretations are discussed in the context of the poem, Wordsworth's other poetical works and generally English Romanticism.
- The teacher asks students to work on the third part of the worksheet that is Making Connections for discussion in the next session.

#### **Seventh session of one hour duration**

- Students share their experience of fear with the class and the class is encouraged to comment on experiences.
- The teacher draws the table given in 3b on the white board and fills it in with the information provided by the students.
- The teacher discusses the similarities and differences in the descriptions of both the poets, with the students and conclusions are drawn according to the opinions of the students.
- The teacher asks students to complete the task in the fourth section (Extension) of the worksheet no. 2 for the next session.

#### **Eighth session of one hour duration**

- Each student presents his/her description in the class.
- Students are encouraged to comment on the descriptions.
- The teacher provides the suggestions where required.
- The teacher asks the students to complete the activity for their Reading Journal.

### **Ninth session of one hour duration**

- The session begins, the teacher writes the following questions on the white board and invites students' responses:
  - i. Who is your favorite musician?
  - ii. What types of melodies does he create?
  - iii. Which of his compositions you like the most and why?
- All the students talk about their favorite musician and characteristics of his/her compositions.
- The teacher writes the following line on the white board and asks the students to comment in the context of the poem:

“The mind of man is fram'd even like the breath and harmony of music”

- The teacher draws students attention to the use of music imagery and other figurative devices in the poem, draws a table on the white board as illustrated below, and asks the students to find types of imagery and other figurative devices and write them in the table:

<b>Line No.</b>	<b>Imagery</b>	<b>Simile</b>	<b>Metaphor</b>	<b>Personification</b>	<b>Others</b>

- The students work in groups of five and complete the table.
- Each group is asked to share the information with other groups.
- The teacher briefly talks on the role of figurative devices in literary texts.

- The teacher distributes worksheet no. 3 among the students and asks them to complete the first section of the worksheet that is reviewing the Text for the next session.

#### **Tenth session of one hour duration**

- The teacher discusses question no. 1a and 1b given in the worksheet with the students.
- Students share their responses and information with other students.
- The teacher adds to students' information and elaborates some points where required.
- The teacher asks the students to complete the second section of worksheet no.3 for discussion in the next session.

#### **Eleventh session of one hour duration**

- The teacher first asks students to review their work in a few minutes, then takes each question/ activity from the second section of worksheet no. 3 and asks different pairs of students to give their opinions and responses.
- Responses generated by all the pairs are discussed and attempt is made to decide on some more acceptable interpretations and opinions.
- The teacher examines the mind maps prepared by different pairs of students for question no. 2e and draws a mind map on the white board with the help of the information and suggestions provided by them.
- The teacher asks students to complete section 3 of the worksheet no.3 for discussion in the next session.

#### **Twelfth session of one hour duration**

- The teacher organizes a brain storming session on the topic given in 3a of Making Connections.
- Some conclusions are decided in accordance with the opinions of the majority of students.

- The teacher then asks students to narrate their experiences as asked in question no.3b. The students share their experiences.
- The teacher draws the table of 3c and completes it with the information provided by the students.
- The teacher sums up the discussion.
- The teacher asks the students to complete section four of worksheet no. 3 for discussion in the next class.

**Thirteenth session of one hour duration**

- The teacher discusses activity no. 3e with the students and examines their completed figures.
- The teacher then asks each pair of students to present their dialogue given in section four of their worksheet (4a) in front of the class.
- The teacher asks students to complete activities 4b, 4c, and 4d and record them in their Reading Journals.
- Students are asked to submit their Reading Journal after one week.

## LESSON PLAN NO. 3

**Subject Area:** Literature

**Text:** “Ode on Intimation of Immortatlity”

**Length:** Three sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Wordsworth’s “Ode on Intimation of Immortality” critically and give a creative response to it. It also aims at helping students to become flexible and independent learner, and have ability to work in collaboration as well. The activities and exercises in this lesson plan are graded according to the Bloom’s taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** The following strategies and techniques are incorporated in the lesson plan to develop students’ creative thinking:

- Brain Storming
- The Bird watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Rehearsal
- Organizing Material
- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses

- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to:

- Critically analyze “Ode on Intimation of Immortality”
- Organize information
- Use visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, summaries, descriptions, critical commentary, and creative response essays

**Material:** The following items are required to conduct these lessons:

- White board
- Worksheets prepared by the teacher

**Procedure:**

**First session of one hour duration**

- The teacher arranges a discussion on the activity no. 1, 2, and 3 of the worksheet for “Ode on Intimation of Immortality”. The teacher comments on the ideas generated by students.

- The teacher then asks the students to work in groups and complete the activities given in section “Reviewing the text” in the worksheet.
- The students complete the task and the teacher discusses their work with them.
- The students are asked to complete the second part of the worksheet that is “Shaping Interpretations” and bring it to the next session for discussion.

### **Second session of one hour duration**

- Students are divided into groups and are asked to discuss the second section of their worksheets in groups.
- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher then asks the students to generate their individual responses on the topics given in the section “making connections.”
- The teacher concludes the discussion.
- The teacher asks students to work in pairs and prepare the dialogue for the activity no. 1 given in “Extension”, the section four of the worksheet for the next session.

### **Third session of one hour duration**

- All the pairs are asked to present the dialogue in front of the class. The students are encouraged to comment on the dialogues.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks students to record their personal response to the poem in their reading journals.

## LESSON PLAN NO. 4

**Subject Area:** Literature

**Text:** “Lines Composed on a Few Miles above Tintern Abbey”

**Length:** two sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Wordsworth’s “Tintern Abbey” critically and give a creative response to it. It also aims at helping students to become flexible and independent learner, and have ability to work in collaboration as well. The activities and exercises in this lesson plan are graded according to the Bloom’s taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the Text, Shaping Interpretations, Making Connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** The following strategies and techniques are incorporated in the lesson plan develop students’ creative thinking:

- Brain Storming
- The Bird watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Rehearsal
- Organizing Material

- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to

- Critically analyze “ Tintern Abbey”
- Organize information
- Use visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, summaries, descriptions, critical commentary, and creative response essays

**Material:** The following items are required to conduct these lessons:

- White board
- Worksheets prepared by the teacher

**Procedure:**

**First session of one hour duration**

- The teacher arranges a brain storming session on the activity no. 1. a. of the worksheet on “Lines composed on a few miles above Tintern Abbey”.

- Then the teachers comments on the ideas generated by students and asks them to complete the activity I. a.
- After that the teacher asks the students to work in pairs and draw illustration for activity 1. c. related to 1.b.
- The teacher asks the students to comment on one another's illustrations.
- The teacher then asks the students to work in groups and complete the activities given in section "Reviewing the Text" in the worksheet.
- The students complete the task and the teacher discusses their work with them.
- The students are asked to complete the second part of the worksheet that is "Shaping Interpretations" and bring it to the next session for discussion.

### **Second session of one hour duration**

- The students are divided into groups and are asked to discuss the second section of their worksheets in groups.
- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher then discusses the next section of the worksheet i.e. "Making connections" and encourages all students to participate in the discussion.
- The teacher asks the students to record their responses to the activities in the section of "Extension" in their reading journals. The teacher also encourages the students to discuss the topics outside the class in their free time.

## WORK SHEET: 1

**Text:** *The Prelude*

### 1. Reviewing the Text

- a. Read the first hundred lines of *The Prelude* Book 1 and complete the table with your responses:

<b>Setting of the poem</b>	
<b>Protagonist</b>	
<b>Objects of nature mentioned</b>	
<b>Mood of the poet</b>	
<b>Hope from nature</b>	
<b>Goal to be achieved</b>	
<b>Poet's creative faculty</b>	

- b. Read the lines again and locate the phrases and words related to nature and city life and write them in appropriate columns below:

Nature	City Life

- c. Consult your notes taken for Exercise No. 1b and summarize Wordsworth's attitude towards nature and city life in your words.

### 2. Shaping Interpretations

- a. Why is a city like a prison for the poet?
- b. Why does the poet seem to believe that nature will give him peace of mind and joy?
- c. In *Preface to the Lyrical Ballads* the poet describes his poetic process that consists of four stages: sense perception, meditation, recollection, and composition. Do you think lines 41 to 47 describe this process?

- d. Do you think in lines 41 to 47 the poet has established harmony between the soul of man and nature? Explain.
- e. How has in your view Rousseau's views about nature as presented in *Emile* contributed in shaping poet's attitude towards nature?
- f. Why does the poet feel that his soul has been "singled out for "holy services"?"
- g. Analyze the first 100 lines in the light of the romantic concept of nature?

### **3. Making Connections**

- a. Do you find Wordsworth's opinion of nature as convincing?
- b. Explain your experience of living in nature. Do you think living in nature would be a better experience for you?

### **4. Extension**

- a. Suppose you were traveling from city to some village, maintaining the setting of the poem express your feelings, emotions, and thoughts.

## WORK SHEET: 2

**Text:** *The Prelude*

### 1. Reviewing the Text

- c. Read lines 160- 168 locate the characteristics of a good poet and present the located information in the form of a flow chart.
- d. Read lines 269-362 and explain briefly following lines, phrases, and words in the context of the poem.

Words, Phrases and Lines	Explanation
Unprofitable traveling	
False steward	
Blend his murmur with my nurse's song	
Sweet	
Tempering our human waywardness	
Composing my thoughts	
Fretful dwelling of mankind	
The calm	
Nature breathes among the hills and grooves	
A playmate	
Naked savage	
Seed time	
Fostered alike by beauty and fear alike	
Nine summers	
The captive of another's toil	
Becomes by play	
Low breathing coming after me	
Sound of undistinguishable motion	

Mean my object	
The end was not ignoble	
Dark invisible workmanship	
Reconciles discordant elements	
Move in society	
Made up the calm existence	
Praise to the end	
Thanks likewise for the means	

## 2. Shaping Interpretations

- g. Why did the poet make a connection between the song of the river Derwent and the child's mind?
- h. What did the poet mean in your opinion when he said that the music of the river has tempered "human waywardness" and "composed" his "thoughts to more than human softness"?
- i. What has made the poet believe that nature was a living phenomenon?
- j. Examine lines 271-285 with reference to Rousseau's *Emile* and comment on the similarity of thought.
- k. How does the bird hunting and the bird stealing incidents justify poet's belief in Nature as a guardian spirit?
- l. Wordsworth's love for nature is generally divided into three following stages:
  - Sensuous pleasure in beauties of nature
  - Intellectual understanding between man and nature
  - Spiritual relation with nature

Read lines 270-350 and analyze these lines in the light of the given stages and explain what stage these lines refer to?

### 3. Making Connections

- c. Refer to the description of river Thames in *The Rape of the Lock* and compare Pope's description with Wordsworth's description of river Derwent in *The Prelude* and complete the table below:

Similarities	Differences

- d. Refer to some of your sweet childhood memories and describe what role they play in your present day to day life?

### 4. Extension

- c. Prepare a presentation on lines 259-365 assigning the role of protagonist to nature.
- d. Record in your Reading Journal the experience of the poet reversing it from fear to happiness.

## WORKSHEET: 3

**Text: *The Prelude***

### 1. Reviewing the Text

- a. Work in pairs and locate the details from the poem relevant to the columns given below:

Games/Activities	Related feelings	Outcome/consequences

- b. Work in pairs and read lines 428 – 441 and explain briefly following words and phrases:

Words & Phrases	Explanation
<b>Wisdom &amp; the spirit of the Universe</b>	
<b>Mean and vulgar works of man</b>	
<b>High objects</b>	
<b>Grandeur in the beating of the heart</b>	

- c. Read your notes in exercise a & b and describe the role of Nature in developing the poet's character.
- d. Work in pairs and briefly explain what does the poet mean in these lines.
- a. **giddy bliss/which like a tempest, works alone the blood/and is forgotten**
  - b. **The earth /and common face of Nature spoke to me/remember able things**

- c. **The scenes, which were a witness of that joy/remained in their substantial lineaments/Depicted on the brain**
- d. **By the impressive discipline of fear/By pleasure and repeated happiness**
- e. **Infancy itself/ A visible scene, on which the Sun is always shining**

## 2. Making Interpretations

- a. Works in groups of four and write answers to the following questions:
  - i. Contrast the poet's experience presented in lines 442-570 with that of presented in lines 310-350 and 372-427. Why do you think the poet has presented these opposing experiences.
  - ii. What is the difference between "intellectual charm" in line 580 and "pure organic pleasure" in lines 590-591? Discuss the relationship between the two in the context of the poem?
  - iii. According to Plato's pre-existence theory human soul travels from heaven to body on earth at the time of birth and leaves the body after death. Analyze the lines 581-585 and 613-616 in the light of this theory and discuss how has Wordsworth connected the platonic concept of pre-existence of soul with his relation with nature.
- b. Work in groups of four to analyze lines 428 – 441 in the light of the following statements:
  - i. Nature as a living being
  - ii. Nature and man-made institution
  - iii. Nature and building of human character
  - iv. Nature and -----
  - v. Plato & the spirit of the Universe
- c. Sum up the discussion on Wordsworth's relation with nature as presented in *The Prelude* Book I in the form of a mind Map form.

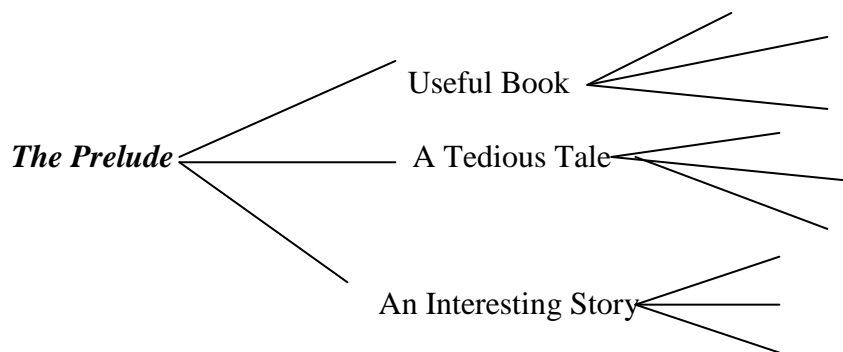
### 3. Making Connections

- a. Do you agree with Wordsworth's concept of Nature as a living being, moral guide and guardian? Consider the context of 21<sup>st</sup> century and give your response.
- b. Supposing yourself as Nature, comment on Wordsworth's thinking, his relation with you and his expectations.
- c. Write briefly about some incident in your early life, which turned out to be a great learning experience for you.
- d. Work in groups of four, read some of the poems by Rumi from the collection of his poems translated in English and compare the mystical aspects of Rumi and Wordsworth's poetry briefly in the following table.

Wordsworth	Rumi

### 4. Extension

- a. Write a letter to Wordsworth suggesting some changes and possibilities to make the poem more interesting.
- b. Discuss *The Prelude* according to the following headings:



- d. Write Wordsworth's biography in your Reading Journal starting with his infancy and ending at this journey back to the valley as given in the beginning of *The Prelude* Book I. Add and delete details and paste some pictures and comments from other poets or writer to make your journal interesting.
- e. Think of the possibilities of the revival of Romanticism in the 21st Century and write an imaginary account of the movement and its contribution in your Reading Journal.
- f. Write an interview between Wordsworth and a modern journalist to be presented on T.V.

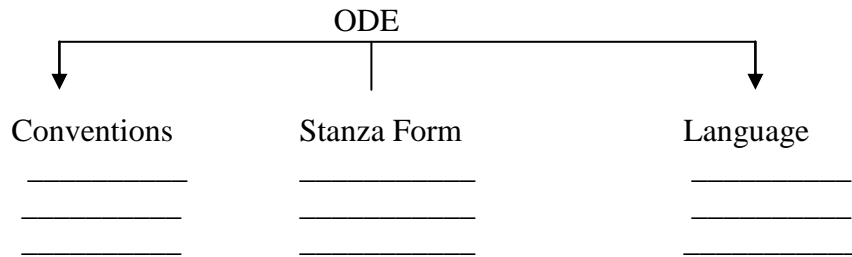
# WORK SHEET: 4

**Text: Ode on Intimation of Immortality**

**Note: All activities have been designed for pair work.**

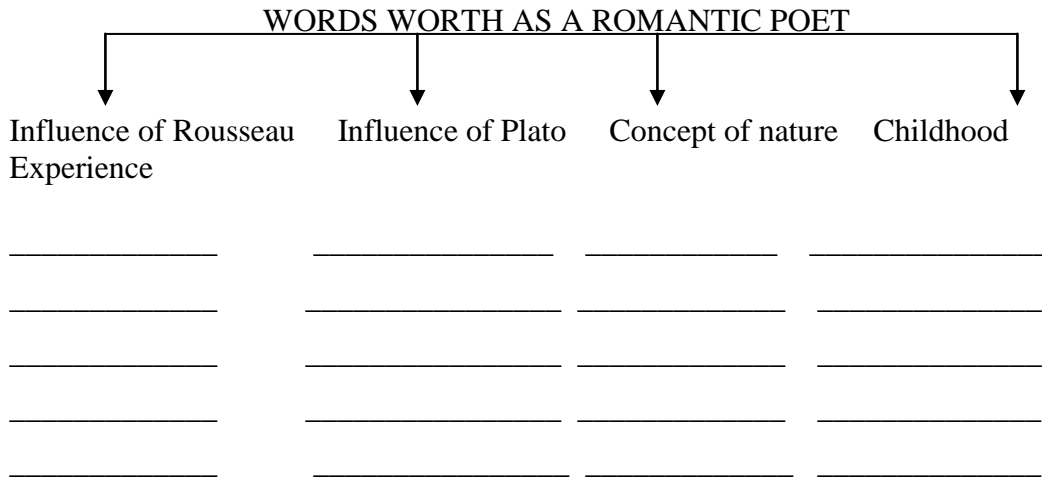
## Background Information

1. Consult the dictionary of literary terms and complete the illustration below:



2. Define briefly what an ode is with the help of the notes taken from exercise one?

3. Recall class discussion on *The Prelude* and complete the illustration below:



## 2. Reviewing the Text

3. Read the first four stanzas of the poem and locate the details relevant to the following words and phrases and complete the table:

Words/Phrases	Relevant Details
The earth and every common sight	
Things which I have seen	
Rainbow, Rose, Water	
Prides and Labs	
Glory	
Thought of grief	
Shepherd boy	
Tree and Pancy	

- d: Read stanza five and list all the words and phrases, the poet has used for the following in column B:

A	B
Birth	
Soul	
God	
Infancy	
Growing Boy	
Youth	
Man	

- c: Read stanza six and write the functions of the earth as mentioned by the poet.

---

---

---

- d: Read stanza seven and write briefly what the poet thinks about a Child's life and activities.

---

---

---

e: Read stanza eight and make a list of all the characteristics of a child.

1: \_\_\_\_\_ 2: \_\_\_\_\_

3: \_\_\_\_\_ 4: \_\_\_\_\_

5: \_\_\_\_\_ 6: \_\_\_\_\_

f: Read stanza nine and define and explain the phrases and lines given below in your words:

- Nature remembers what was so

fugitive: \_\_\_\_\_

- Perpetual benediction:

\_\_\_\_\_

- Simple creed of childhood

\_\_\_\_\_

- Obstinate questioning:

\_\_\_\_\_

- Blank misgiving of a

creature: \_\_\_\_\_

- First affections:

\_\_\_\_\_

- Shadowy recollection:

\_\_\_\_\_

- Master light of all over seeing :

\_\_\_\_\_

- Truths that wake to perish never:

\_\_\_\_\_

- Season of calm weather:

\_\_\_\_\_

- Sight of imperial sea:

\_\_\_\_\_

- A moment travel thither:

\_\_\_\_\_

g: List all the objects the poet has addressed in stanza nine and ten?

h: Read the poem again and trace out the following figures of speech and rhetorical devices:

\_\_\_\_\_

Similes	
Metaphors	
Alliteration	
Symbols	
Imagery	
Any Other	

### 3. Shaping Interpretations

1. Refer to first four stanzas of the poem and explain why in your opinion, the poet feels that his relation with Nature has changed?

\_\_\_\_\_

\_\_\_\_\_

2. What is the relationship between human soul and God as mentioned in Stanza five?

\_\_\_\_\_

\_\_\_\_\_

3. Why has the poet regarded the infancy as the most significant stage in human development as compared to other stages?

\_\_\_\_\_

\_\_\_\_\_

4. Do you think Wordsworth's concept of infancy is based on Plato's pre-existence theory?

---

---

5. Why in your opinion, the poet considers human life as “endless imitation”?

---

---

6. The poet thinks that there is a conflict between the earth and the human soul. Refer to stanza five to seven and give you opinion.

---

---

7. The poet glorifies childhood in stanza eight by drawing a contrast between adulthood and child hood. Do you justify his opinion?

---

---

8. The poet thinks that Nature can revive childlike purity back to the soul of an adult. Comment with reference to Stanza nine .

---

---

9. What does the poet mean by “Sober colouring of the clouds” which “kept watch O’er man’s mortality”. Comment also on the state of poet’s mind and development of his thought at the end of the poem.

---

---

---

---

#### **4. Making Connections**

1. Do you think revisiting a familiar place brings different feelings and experiences?
2. Have you ever minutely observed a six year old child's activities? Compare and contrast your observation with Wordsworth.
3. What is your concept of nature? Do you agree with Wordsworth?
4. What is your opinion about infancy? How far do you agree or disagree with Wordsworth?

#### **5. Extension**

1. Write a dialogue between yourself and Wordsworth on the issues presented in the poem.
2. Write your personal response to the poem in your Reading Journal.

## WORKSHEET: 5

### Text: Lines Composed on a Few Miles above Tintern Abbey

Note: All Activities have been designed for pair work

#### 1. Background Information

- a. Recall discussion on *The Prelude* and *Ode on Intimation of Immortality* and complete the table below:

Object/Concept	Attributes
Nature	
First stage of love for Nature	
2 <sup>nd</sup> stage of love for Nature	
Third stage of love for Nature	

- b. Consult the dictionary and encyclopedia of philosophy or browse the internet and define the following terms.

i. Mysticism:

ii. One Life theory:

iii. Pantheism

- c. Now draw some illustration showing the relationship of these three concepts.

#### 2. Reviewing the Text

- a. Read the first thirty-seven lines of the poem and select the words and phrases related to the following.

Time	
Nature	
Characters	
City/town	
Recollection	
Feeling/emotions	
Good man	

- b. Read your notes in exercise (a) and summarize the lines in about 30 words.
- c. Read lines from 37 to 60 and define and explain following terms and concepts in the context of the poem.

i.	aspect more sublime	
ii.	blessed mood	
iii.	burthen of the mystery	
iv.	weight of all this unintelligible world	
v.	breath of this corporeal frame	
vi.	motion of our human blood / almost suspended	
vii.	laid asleep in body	
viii.	become a living some	
ix.	power of joy	
x.	see into the life of the things	
xi.	fever of the world	
xii.	my sprit turned to thee	

- d. Read your definitions and explanation and summarize the lines in about 30 words.
- e. Lines from 60 – 85 describe the poet’s recollection of this childhood. What experience does he specifically recollect? Locate all the relevant words, phrases and lines and enlist them below.

- f. Explain Wordsworth’s first stage of love for nature as described in lines 69-85.
- g. Lines 85 – 94 describe a development in poet’s relation with nature. What is that development?
- h. Read lines 95 – 105 and enlist the words and phrases related to the following:

Concept/object	
A presence	
A sense sublime	
A motion and a Spirit	

- i. Summarize the lines in about 30 words.
- j. Read lines 106 – 114 and enlist all the attributes of nature mentioned.
- k. Read the lines and answer briefly:
  - l.
    - i. Who the dearest friend in line 120.
    - ii. What does the poet desire to get from his dearest friend?
    - iii. What are the gift and blessings of nature mentioned in lines 125 – 138?
    - iv. Paraphrase the poet’s prayer for his sister given in lines 138-146.
    - v. What does the poet want his sister to remember in lines 148-163?

### 3. Shaping Interpretations

- 1. Why does in your opinion the poet describe the scenes of the valley in detail on his second visit to the place after five years?
- 2. Do you think the reference to vagrant “dwellers” in line 21 and “Hermit” in Line 25 is relevant in the context?

3. Examine the phrases “Sensations Sweet”, “felt along the heart” and “from tranquil restoration” in lines 29 -32 and explain the function nature had played in the poet’s life?
4. Why does he regard “acts/of kindness and love” as the “best portion a good men’s life.” (Lines 35 -37)
5. In lines 40 – 45, the poet describes his mystical / spiritual experience with nature. What do you understand about the experience? Comment.
6. In lines 70 – 105, the poet has described the development in his relation to nature. Classify the stages of the development analyzing their specific characteristics.
7. How is the philosophy of pantheism applicable to lines 95 – 106? Examine the lines in the light of Pantheism.
8. Why does the poet still desire to be “a lover of the meadows and the woods” in line 106?
9. Why in your opinion the poet regards nature as “the nurse / the guide, the guardian or heart soul/ of all my moral being” in lines 112 -114?
10. How can the poet revive his former relationship with nature (early stage of his relationship with nature) through his sister? Comment.
11. Why does the poet like his sister to remember their visit to the valley?

#### **4. Making Connections**

- a. Do you think that Nature can become a source for mystical and Spiritual experiences as in the case of Wordsworth?
- b. Wordsworth sees a cosmic unity that is oneness of man, nature and God in his mystical visions. Read about some hermit or mystic and the nature of mystical experience and then compare it with the experience of Wordsworth.
- c. Did you ever have a dream vision or experience, which had some spiritual significance? Recall your feelings and describe the impact of that experience on your life.

## **5. Extension**

- a. Write a dialogue between yourself and Wordsworth on the discussion related to Wordsworth's relation with nature, the development of this relation and mystical significance of this relation.
- b. Read any mystic poet. Compare him with Wordsworth and write your commentary in your Reading Journal.
- c. Draw some creative illustrations and suggest some innovative activities related to Wordsworth and his poetry.
- d. Write your version of the poem in prose reversing the role of nature from a moral spiritual guide to that of a hostile agent.

## Appendix G

### LESSON PLAN NO. 1

**Title of the Lesson Plan:** Author and his age

**Subject Area:** English Literature

**Level:** Master's of English

**Length:** Two sessions (each session of one hour duration)

**Overview:** This lesson is designed to review the Author's age i.e. 1857-1927 and Features of Modern Fiction. The students had already read a course on Fiction in the first semester. They had also taken a course on literary forms and movements. This lesson plan is designed to apply strategies and techniques in teaching literature that help nurture creative thinking in students of literature at master's level. The strategies and techniques involved in the lessons include: Brainstorming, Making Connections and transference, Fraction or The Bird watching Method, Rehearsal and In-depth study, Discussion Web, Attribute Listing, Collaboration and cooperation, Project works, Follow up Activities and Extension, etc.

**Purpose:** This lesson gives students an opportunity to practice some of the important strategies and techniques that enhance creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:  
(Selected activities to be added)

- Attribute Listing
- Preparing Checklists
- Brain Storming

- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Rehearsal
- Organizing Material
- Learning with Projects
- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

**Objectives:** Students will be able to:

- Discuss the main characteristics of the age, which forms a specific background for the novel *Heart of Darkness*, trends in Modern fiction, and Conrad as a modern novelist.
- Organize information in form of tables and flow charts
- Work in collaboration
- Write summary of the discussion
- Write response essay on various aspects of the Twentieth century Europe
- Collect information to record in their reading journal
- Prepare bibliographies
- Prepare presentations
- Generate personal opinions and responses

**Material:** The following items are required to conduct these lessons:

- White board and markers
- Transparencies with main events of the Twentieth century Europe
- Handouts with information about the Twentieth century Europe and Conrad's life

**Procedure:**

**First session of one hour duration**

- The lesson begins with the students' discussion on political, social, economic, and intellectual the aspects of the Europe in general and of England in particular in Conrad's age. The teacher distributes handouts taken from different books and websites on Conrad's age among the students divided into groups. The students locate the required information with the help of the transparencies and add it to the main topics shown to them while they are reading and filling in the table on the hand out in activity 1.i. and 1.iii.
- The teacher asks students to summarize the information collected through various sources and share it with the rest of the class.
- The teacher asks them to watch the movies *Roots* and *Amistad* and note down important information about the life of individuals, nations, their priorities, and their social, political and economic set up, transportation, scientific development, colonization, slavery and slave trade in Europe etc. for the next session.

**Second session of one hour duration**

- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.

- The teacher concludes the discussion in accordance with the student's opinions.
- The students are encouraged to comment on the presentations.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks students to record their comments on the author's age in their Reading Journal.

## LESSON PLAN No. 2

**Title of the Lesson Plan:** Colonization

**Subject Area:** Literature

**Text:** *Heart of Darkness*

**Length:** Four sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Conrad's *Heart of Darkness* critically and give a creative response to it. It also aims at helping students to become independent learners and work in collaboration as well. The activities and exercises in this lesson plan are graded according to Bloom's taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:

(Selected activities to be added)

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Annotated Reading
- Rehearsal
- Organizing Material
- Learning with Projects

- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to:

- Critically analyze Conrad's *Heart of Darkness*
- Organize information
- Use tables and charts and other visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays

**Material:** The following items are required to conduct these lessons:

- White board
- Over head projector and transparencies
- Worksheets prepared by the teacher
- Text Book *Heart of Darkness* by J. Conrad

- *The Twilight in Delhi* by Ahmed Ali (Students have read this novel in the first semester)
- *A Passage to India* by E. M. Forster (Students have read this novel in the current semester)
- *Things Fall Apart* by Chinua Achebe (Students are advised to read the novel and tell the story to each other in their free time).
- And other references books

### **Procedure:**

#### **First session of one hour duration**

- The teacher invites students to recall Ahmed Ali's novel *The Twilight in Delhi* (which they have read in the previous semester) and think about the different activities of the British imperialists and the effect of these activities on the social, economic, political, religious and cultural life of the natives.
- The teacher invites students to contribute their points and she writes these points on the white board.
- The teacher divides the class into groups of four/ five and distributes the worksheets no. 2.1.i. (enclosed) among the students and asks them to go through the novel *Heart of Darkness* and fill in the three columns given on the work sheet.
- She goes round the class to help students in filling in columns.
- Students are asked to complete the worksheet that is Reviewing the Text and bring it to next session for discussion.

#### **Second session of one hour duration**

- Students complete activities 2.1.i. in the Reviewing the Text section of the worksheet.

- Students complete their task. The teacher draws the table of activity 2.1.i. on the white board, ask the students to consult their worksheets and help her complete the tables. All students are encouraged to contribute and the teacher adds or deletes information after discussing with the students.
- Students are asked to summarize Conrad’s depiction of imperialism through characters, objects, incidents, situations and settings as directed in 2.1.ii. of the worksheet and share it with the rest of the class.

**Third session of one hour duration**

- Students are divided into groups and are asked to discuss the second section i.e. Shaping Interpretations section of their worksheets in groups.
- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher asks the students to see the third section of the worksheet i.e. Making Connections and discuss within groups the way E. M. Forster has treated the theme of colonialism in his novel *A Passage to India* (as the students have read this novel in this semester before reading *Heart of Darkness*). She draws the following chart on the board and invites students to help her filling it in:

<b>Foster’s and Conrad’s presentation of marginalized nations</b>	
<u>DIFFERENCES</u>	<u>SIMILARITIES</u>
<b>Chinua Achebe’s and Conrad’s presentation of marginalized nations</b>	
<u>DIFFERENCES</u>	<u>SIMILARITIES</u>

- Students' responses are written on the white board.
- Students summarize the information in Mind Maps and share their summaries with other groups.
- Students are asked to work in groups of five and complete activity 2.3.ii. in the Making Connections section of the worksheet.
- The teacher concludes the discussion in accordance with students' opinions.
- The teacher asks the students to prepare a presentation on the activities given in Extension, the section four of the worksheet for the next session. There are four tasks set for the learners. Each group can choose one task for the performance.

#### **Fourth session of one hour duration**

- All the students present their work in the class.
- The students are encouraged to comment on the presentation.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks the students to record their comments on the theme of Colonization in the three novels *Heart of Darkness*, *Things Fall Apart* and *A Passage to India* in their Reading Journal.

## LESSON PLAN No. 3

**Title of the Lesson Plan:** The infestation of darkness: exterminating the effects of civilization

**Subject Area:** Literature

**Text:** *Heart of Darkness*

**Length:** Four sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Conrad's *Heart of Darkness* critically and give a creative response to it. It also aims at helping students to become independent learners and work in collaboration as well. The activities and exercises in this lesson plan are graded according to Bloom's taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Annotated Reading
- Rehearsal
- Organizing Material
- Learning with Projects

- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking
- PMI

**Objectives:** The students will be able to:

- Critically analyze Conrad's *Heart of Darkness*
- Organize information
- Use tables and charts and other visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays

**Material:** Following items are required to conduct these lessons:

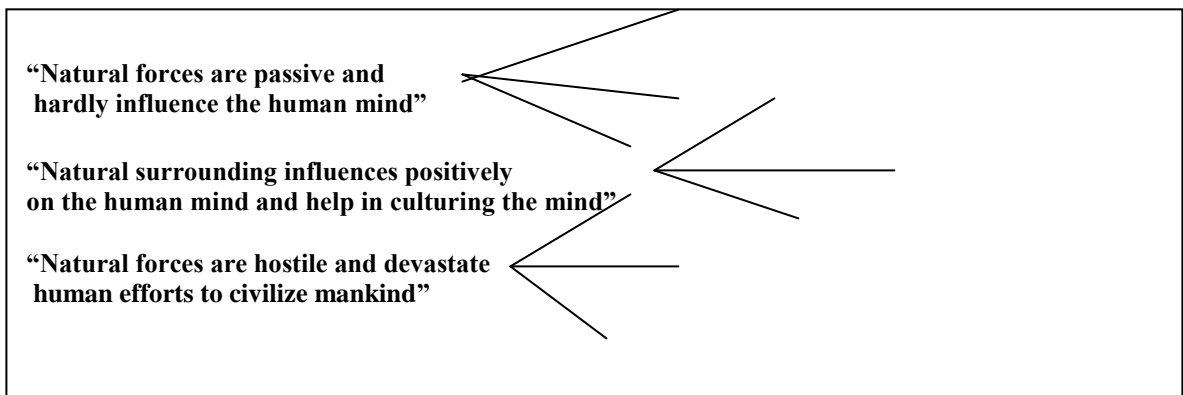
- White board
- Over head projector and transparencies
- Worksheets prepared by the teacher

- Text Book *Heart of Darkness* by J. Conrad
- *Lord of Flies* by William Golding (The novel is included in the scheme of studies for the current semester)
- *Things Fall Apart* by Chinua Achebe (Students are advised to read the novel and tell the story to each other in their free time).
- B. Russel’s *History of Western Philosophy, Encyclopedia of Philosophy,*

**Procedure:**

**First session of one hour duration**

- The teacher writes the following topic on the white board and ask the students to generate three for each:



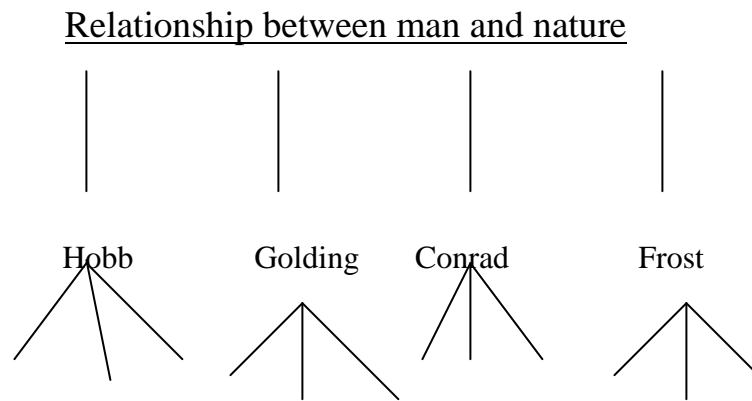
- The teacher invites students’ responses on influence of nature on the mind of man, appreciates them and writes their points on the white board.
- She asks the students to keep these points in the mind while reading the text *Heart of Darkness*.
- The teacher divides the class into groups of four/ five and distributes the worksheets no. 3.1.i. (enclosed) among the students and asks them to go through the novel *Heart of Darkness* and fill in the flow charts given on the work sheet.
- She goes round the class to help students in filling in the chart.
- Students are asked to complete the worksheet that is Reviewing the Text and bring it to next session for discussion.

## Second session of one hour duration

- Students complete activities 3.1.i.a.b.c. in the Reviewing the Text section of the worksheet.
- Students complete their task. The teacher draws the table of activities 3.1.i.a.b.c. on the white board, asks the students to consult their worksheets and help her complete the tables. All students are encouraged to contribute and the teacher adds or deletes information after discussing with the students.
- The teacher invites the students to discuss the suggestive and angular nature of the images used by Conrad. She encourages their point of views and writes them on the white board.
- Students are asked to summarize Conrad's depiction of the inner brutality of the torchbearers as revealed through the flow chart in 3.1.i and share it with the rest of the class.
- Students are asked to discuss the second section i.e. shaping Interpretations section of their worksheets in groups.
- Then students are asked to read pages 63-64 of the novel in the class, underline the lines, which are printed on the work sheets and discuss their deeper meanings within the groups.
- The teacher then writes the main points of their interpretation on the board.
- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher asks the students to see the third section of the worksheet i.e. Making Connection and read *Encyclopedia of Philosophy, Russell's History of Western philosophy* and use net sources to find Hobbe's concept of human nature and evil as depicted in *Leviathan* and bring it to next session for discussion.

### Third session of one hour duration

- The teacher takes each question of the third section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher asks the students to see the third section of the worksheet i.e. Making Connections and discuss within groups the similarities and differences between Conrad's views on human nature and that of Hobbes's, Golding's and Frost's.
- The teacher draws the following Advance Organizer on the board and invites students to help her fill it in:



- Students' responses are written on the white board.
- Students summarize the information given in Advance Organizer and share their summaries with other groups.
- Students are asked to work in groups of five and complete activities 3.4. in the Extension section of the worksheet for the next session.

#### **Fourth session of one hour duration**

- The teacher takes each question of the fourth section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher concludes the discussion in accordance with students' opinions.
- All the students present their work in the class.
- The students are encouraged to comment on the presentation.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks the students to record their comments on the theme of infestation of darkness: exterminating the effects of civilizations in the novels *Heart of Darkness*, and *The Lord of Flies* in their Reading Journal.

## LESSON PLAN No.4

**Title of the Lesson Plan:** Characters in Heart of Darkness

**Subject Area:** Literature

**Text:** *Heart of Darkness*

**Length:** Four sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Conrad's *Heart of Darkness* critically and give a creative response to it. It also aims at helping students to become independent learners and work in collaboration as well. The activities and exercises in this lesson plan are graded according to Bloom's taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:

(Selected activities to be added)

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Rehearsal
- Organizing Material
- Learning with Projects
- In-depth Study or Meaningful Learning

- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to:

- Critically analyze Conrad's *Heart of Darkness*
- Organize information
- Use tables and charts and other visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays

**Material:** Following items are required to conduct these lessons:

- White board
- Over head projector and transparencies
- Worksheets prepared by the teacher
- Text Book *Heart of Darkness* by J. Conrad
- Other references books

**Procedure:**

**First session of one hour duration**

- Teacher invites students to recall the art of characterization by various novelists and contribute their points to the class and she writes these points on the white board.
- The teacher divides the class into groups of four/ five and distributes the worksheets no. 4.1.i. (enclosed with) among the students and asks them to go through the novel *Heart of Darkness* and fill in the organizer given on the work sheet.
- She goes round the class to help students in completing the Advance Organizer and asks them to summarize their points that is Reviewing the Text and bring it to next session for discussion.

**Second session of one hour duration**

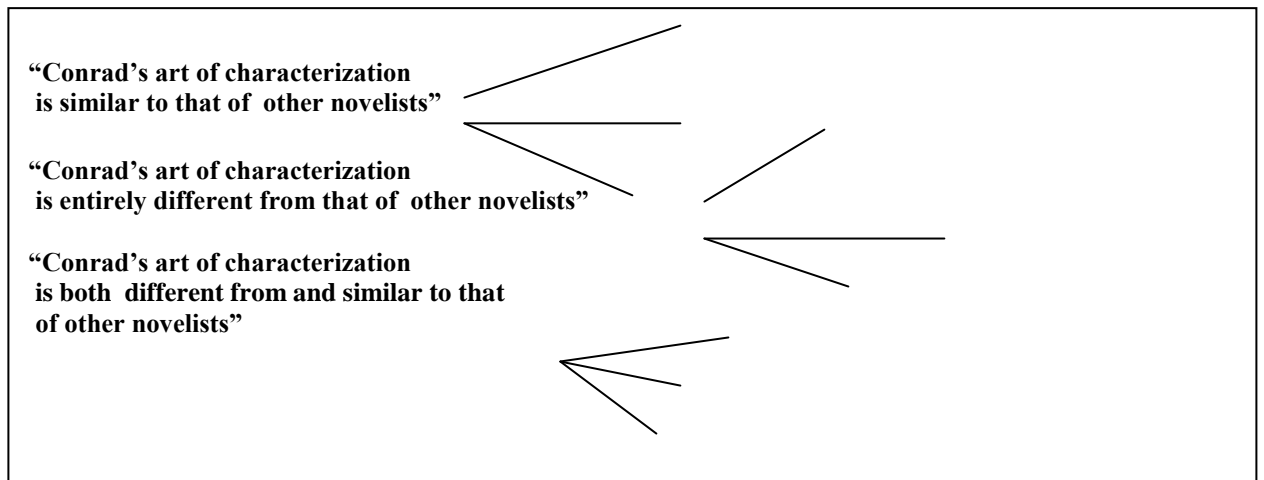
- Students complete activities 4.1. in the Reviewing the text section of the worksheet.
- The teacher takes each question of the first section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- Students complete their task. The teacher draws the following table on the board and asks the students to consult their worksheets and help her complete the table.

Check list for art of characterization	Conrad's art of characterization

- All students are encouraged to contribute and the teacher adds or deletes information after discussing with the students.
- Students are asked to summarize Conrad's art of characterization as directed in 4.2 of the worksheet and share it with the rest of the class.

### **Third session of one hour duration**

- Students are divided into groups and are asked to discuss the second section i.e. Shaping Interpretations section of their worksheets in groups.
- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- The teacher asks the students to see the third section of the worksheet i.e. Making Connections and discuss within groups the salient features of Fielding's, Jane Austen's, Dickens', Hardy's and G. Eliot's art of characterization (the students have read these novelists in previous semesters).
- The teacher writes the following topics on the white board and asks the students to generate their opinions with the help of the following illustration:



- The teacher invites students' responses on Conrad's art of characterization and appreciates them and writes these points on the white board.
- She then asks them to note their analysis of Conrad's art of characterization and that of other novelists.
- The teacher asks the students to prepare a presentation on the activities given in Extension, the section four of the worksheet, for the next session.

#### **Fourth session of one hour duration**

- All the students present their work in the class.
- The students are encouraged to comment on the presentations.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks the students to record their comments on Conrad's art of characterization in their Reading Journal.

## LESSON PLAN No.5

**Title of the Lesson Plan:** Plot of *Heart Of Darkness*

**Subject Area:** Literature

**Text:** *Heart of Darkness*

**Length:** Four sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Conrad's *Heart of Darkness* critically and give a creative response to it. It also aims at helping students to become independent learners and work in collaboration as well. The activities and exercises in this lesson plan are graded according to Bloom's taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:  
(Selected activities to be added)

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Rehearsal
- Organizing Material
- Learning with Projects

- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to

- Critically analyze Conrad's *Heart of Darkness*
- Organize information
- Use tables and charts and other visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays

**Material:** Following items are required to conduct these lessons:

- White board
- Over head projector and transparencies
- Worksheets prepared by the teacher
- Text Book *Heart of Darkness* by J. Conrad
- Other references books

**Procedure:**

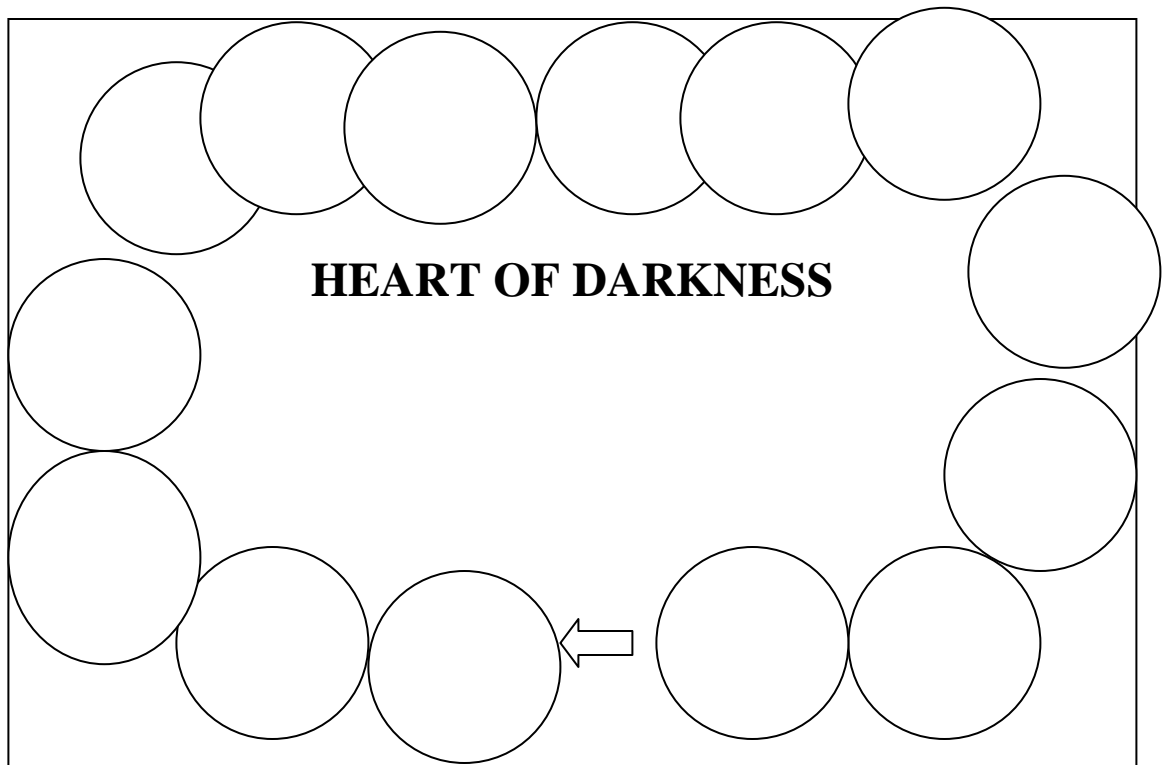
**First session of one hour duration**

- The teacher starts the brainstorming session and invites students to pool their opinions about the following topic which she writes on the board:

“The life and soul so as to speak of tragedy is plot Characters come second”

She invites students to contribute their points and writes these points on the white board.

- The teacher divides the class into groups of four/ five students and asks them to go through the three sections of the novel and note down the key events of the novel *Heart of Darkness*. She then draws the following flow chart on the board and asks them to fill it in:



- Students are asked to complete the flow chart and summarize the key events of the story and bring it to next session for discussion.

**Second session of one hour duration**

- The teacher invites students to share their summaries and encourages their efforts.
- Students are asked to discuss the second section i.e. Shaping Interpretations section of their worksheets in groups.
- The teacher takes each question of the second section and discusses with the students. All students are encouraged to contribute in the discussion and their responses are appreciated.
- Then **the teacher** writes the main points of their interpretation on the board.
- Students are asked to watch the film version of the novel at home and note down the sequence of the events as presented in that film for discussion in the next session.

**Third session of one hour duration**

- The teacher then invites the students for discussion by drawing the following table on the board:

Sequence of the events in the novel	Sequence of the events in the film

- The teacher then draws the following organizer on the board: and invites students to generate their view point:

“The sequence of the events in the novel is more effective than that of the one in the film”	<b>YES</b>	<b>NO</b>
--	------------	-----------

- The teacher then encourages students for generating ideas and fills in the organizer and asks them to summarize the details.
- The teacher concludes the discussion in accordance with students’ opinions.
- The teacher asks students to prepare a presentation on the activities given in Extension, the section four of the worksheet for the next session.

#### **Fourth session of one hour duration**

- All the students present their work in the class.
- The students are encouraged to comment on one another’s presentation.
- The teacher appreciates the creative efforts of the students, sums up the discussion and asks the students to record their comments on the plot construction in the novel *Heart of Darkness* in their Reading Journal.

## LESSON PLAN No.6

**Title of the Lesson Plan:** Symbolism

**Subject Area:** Literature

**Text:** *Heart of Darkness*

**Length:** Two sessions (each session of one hour duration)

**Overview:** This lesson plan is designed to help students read Conrad's *Heart of Darkness* critically and give a creative response to it. It also aims at helping students to become independent learners and work in collaboration as well. The activities and exercises in this lesson plan are graded according to Bloom's taxonomy of educational objectives in cognitive domain. The activities are divided into four sections: Reviewing the text, Shaping interpretations, Making connections, and Extension.

**Purpose:** This lesson is designed to give students practice in strategies and techniques that nurture creative thinking.

**Strategies and techniques to develop creative thinking:** Following strategies and techniques are incorporated in the lesson plan to develop students' creative thinking:  
(Selected activities to be added)

- Attribute Listing
- Preparing Checklists
- Brain Storming
- The Bird Watching Method or Fraction
- The Reversal Method
- Pre reading Activities and Prediction
- Visualization or Visual Thinking
- Rehearsal
- Organizing Material

- Learning with Projects
- In-depth Study or Meaningful Learning
- Reorganizing or Rearrangement
- Putting to other Uses
- Synectics
- Collaborative Learning
- Transference or Making Connections
- Follow up Activities or Extension
- Advance Organizer
- Mind Mapping
- Problem Solving
- Whole Brain Thinking

**Objectives:** The students will be able to:

- Critically analyze Conrad's *Heart of Darkness*
- Organize information
- Use tables and charts and other visual techniques
- Take notes
- Make independent interpretations
- Generate personal responses
- Draw comparisons
- Connect the text with other subject areas and real life
- Work in groups and pairs
- Write reading journal, dialogue, letter, summaries, descriptions, critical commentary, and creative response essays

**Material:** Following items are required to conduct these lessons:

- White board
- Over head projector and transparencies
- Worksheets prepared by the teacher

- Text Book *Heart of Darkness* by J. Conrad
- Other references books

**Procedure:**

**First session of one hour duration**

- Teacher starts the brainstorming session and invites students to recall scenes from the film version of the novel (They have watched the movie) which are unforgettable and have a deep link with the main themes of the novel and asks them to share their observation with the rest of the class.
- The teacher divides the class into groups of four/ five and distributes the worksheets no. 6.1 (enclosed with) among the students and asks them to go through the novel *Heart of Darkness* and fill in the 1<sup>st</sup> three columns of activity 6.1.i.a. and the 1<sup>st</sup> two columns of activity vii.b. given on the work sheets.
- She goes round the class to help students in filling in the columns.
- Students are asked to complete the worksheet that is Reviewing the Text and bring it to next session for discussion.

**Second session of one hour duration**

- The teacher invites the students to share their summaries and encourages their efforts.
- Students are asked to discuss within groups and fill in the fourth column of activity i.a. and the third column of activity vii.b. of their worksheet.
- Then the teacher writes the main points of their interpretation on the board.
- All students are encouraged to contribute their views for the question in the third section of the worksheet.

- Students are asked to prepare activities for the Extension section in groups outside the classroom and present in written form. Feed back is given during students' consultancy hours. Their responses and efforts are highly appreciated.

# WORKSHEET: 1

**Text:** *Heart of Darkness*

## 1. Author and his Age

- i. Consult Encyclopedia Britannica, Encarta 2006, Americana, *Critical History of English Literature* by David Daiches and Internet to collect information to complete the table below:

1	Political set up	
2	Social set up	
3	Economic condition	
4	Prevalent philosophies	
5	Attitude towards religion	
6	Domestic life	
7	Scientific development	
8	Communication and transportation	
9	Life of individuals	
10	Women's status	
11	Imperialism	

- ii. Discuss in group and write one paragraph about different aspects of the Twentieth century Europe in general and of England in particular. Do share it with the rest of the class.
- iii. Read the *Pageant of the World History*, Encyclopedia Britannica, Encarta 2006 and find instances of colonization in the world and fill in the table below:

COLONIZERS	COLONIZED NATION & DURATION	GEOGRAPHICAL SPECIFICATION	SOCIO, RELIGIOUS & POLITICAL CONDITIONS TOWARDS COLONIZATION	ECONOMIC, & POLITICAL LEADING	REASONS LEADING TOWARDS INDEPENDENCE
FRANCE					
ENGLAND					
AMERICA					
PORTUGUESE					
ANCIENT ROME					

- iv. Do write a few sentences about each of the colonizers mentioned.
- v. See activity i & ii and discuss within groups, features of the twentieth century.
- vi. How would you assess the twentieth century?
- vii. In what way the age influences a writer?

- viii. Watch the movies *Roots* and *Amistad* and note important information about slavery and slave trade at home.
- ix. Discuss within the group, the salient features of the slave trade and nations involved in it.
- x. How far do you think slavery is the direct out come of colonialism?
- xi. What do you think were the major problems in abolishing slave trade?
- xii. Go through the novel *Heart of Darkness* and trace whether the plot, characters, setting, incidents and situations reflect the writer's age? Which of the features of the age given in the activities above are present in the novel?
- xiii. How far do you think Conrad has been successful in depicting his age in his novel *Heart of Darkness*?

## 2. Colonization

### 2.1. Reviewing the Text

- ii. Read the novel *Heart of Darkness*, discuss in groups and find out the characters, objects, incidents, situations and settings which denote the imperialist intent of the French and fill in the table below: You may add more activities as observed by Marlow similar to the ones already given.

Objects	Brief description	How do they contribute to imperialism?
Misunderstanding about two black hens (p.23)		
Two women knitting		

black wool (p.25)		
French Steamer (P.27)		
Shells, muzzles, guns screech (P.28)		
Ship of war firing into a continent (P.28)		
Railway truck (p.29)		
Chain-gang (p.30)		
A white man in an unexpected elegant get up (p.32)		
Accountant's office (p.33)		
Network of paths over the empty land (p.34)		
Ruined grass walls (p.34)		
Body of a middle-aged negro, with a bullet-hole in the forehead.		
Brick maker (p.38)		
The beaten nigger (p.38)		
Sinister effects of torch light in the oil painting (p.39)		
Boiler (p.51)		
Tattered flag P.52)		
Dismantled dwelling of a white man.(p.52)		

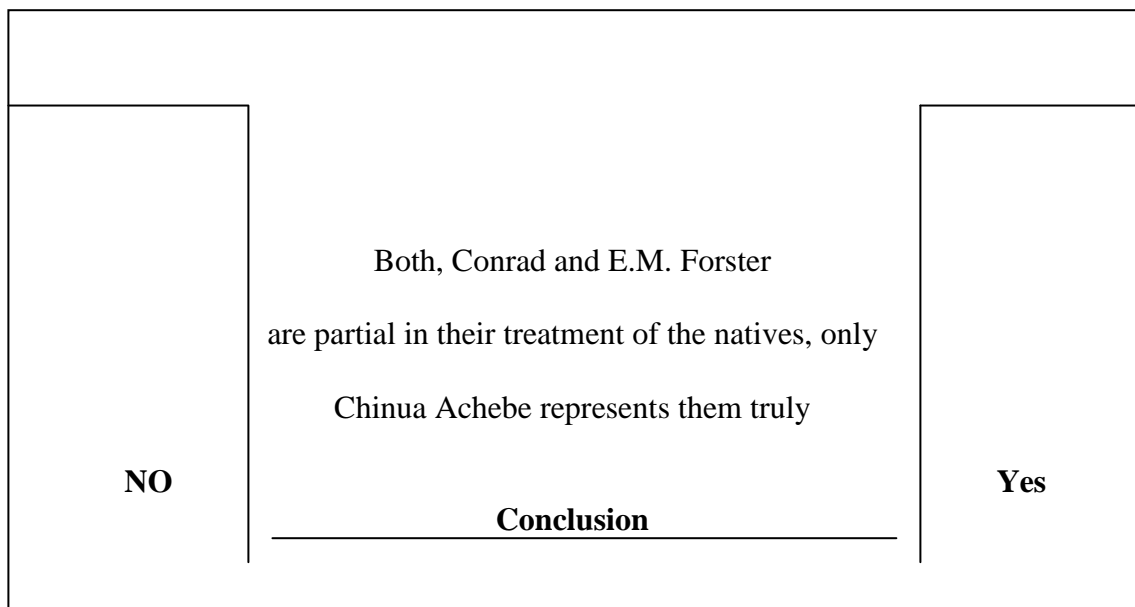
- iii. Consult your notes and summarize Conrad's depiction of imperialism through characters, objects, incidents, situations and settings.

## 2.2. Shaping Interpretations

- iii. What types of activities are going on in the continent?
- iv. Do you think these activities are in accord with the colonizers' so called plan to civilize the uncivilized brutes?

## 2.3. Making Connections

- i. Discuss within groups and explain the way Chinua Achebe has treated the theme of colonialism in his novel *Things Fall Apart*.
- ii. What differences and similarities do you trace between the marginalized nations as presented in two novels: *Passage to India* and *Heart of Darkness*?
- iii. Discuss and generate ideas for the following statement and complete the web:



## **2.4. Extension**

- iv.** Discuss in groups the damage done to the marginalized nations by the Imperialists. Do include the destruction of economy, culture, social set up, political set up, religious institutions, education system and language domain of the indigenous and displaced nations.
- v.** Imagine Shakespeare's *Julius Caesar* as the colonizer of Africa. Discuss in groups and contrive a scene in Congo illustrating the life of Africans under the new system implemented by Romans. What differences and resemblances would you find under the French and the Roman imperialists
- vi.** Imagine yourself to be one of the members of the colonized Africans who appeared in the text, talking to Kurtz, Marlow and the company Manager, telling them openly what the superior masters have done to the Africans, their homes, families, culture and (economy) ivory in an eloquent language like that of Okonkwo in *Things Fall Apart*. Discuss in group and write a one act play and present this play in the class.

## **2. Infestation of Darkness: Exterminating the Effects of Civilization**

### **2.1 Reviewing the Text**

Work in groups and read the novel again and fill in the following boxes to illustrate the inner brutality of man. The first one has been done as an example.

(a.) **Incidents denoting inner brutality of the torch bearers**

Fresleven 'whacked the old nigger mercilessly', & got killed by the old chief's son, the village vacated ...p.23

(b.) **Images and symbols denoting inner brutality of the torch bearers**

"... when Romans came...Light came out of this river...like a running blaze on a plain..." P.20

(c.) **Images and symbols denoting the infestation of darkness exterminating the effects of civilizations**

"Here and there a military camp lost in a wilderness, like a needle in a bundle of hay..." p.20

"There was an old hippo that had the bad habit of getting out on the bank and roaming at night over the station ground ..." P.43

- i. Work in groups and write a brief paragraph about each incident.

- ii. Working in groups trace the origin, the angular and the suggestive nature of these images and find out how specifically do they contribute to inner brutality of the torch bearers?

## 2.2. Shaping Interpretations

- i. Read pages 63-64 of the novel and discuss in groups the deeper and philosophic meaning of these expressions:
  - “The wilderness had patted him on the head,... it was like ... ivory ball; it caressed him... it had taken him, loved him, got into his veins, ... sealed his soul to its own by the inconceivable ceremonies of some devilish initiation.”
  - “... my intended my ivory, my station, my station, my river ... every thing belonged to him... The thing was to know what he belonged to, how many powers of darkness claimed him for their own...”
  - “... what particular region of the first ages a man untrammelled feet may take him into by the way of solitude, utter solitude without a policeman ... where no warning voice of a kind neighbour be heard whispering of public opinion? These little things make all the great difference.”
- ii. In what other part of the novel do you find similar ideas? How do they contribute to Conrad’s philosophy?
- iii. Do you think the torchbearers are behaving as they (educationists, teachers) ought to do? Illustrate from the novel.

- iv. How do you think darkness and evil are exterminating the effects of civilization in this novel?

### **2.3. Making Connections**

- v. Read *Encyclopedia of Philosophy*, *Russell's History of Western philosophy* and net sources to find out Hobbe's concept of human nature and evil as depicted in *Leviathan*.
- vi. Read the novel *Lord of Flies* by William Golding and trace his concept of human nature and man's inner corruptibility.
- vii. Discuss in groups to trace similarities and differences between Conrad's views on human nature and that of Hobbes's and Golding's.
- viii. Read Robert Frost's poems included in your course and trace the role of nature in the life of man as depicted by the poet. Discuss similarities and differences between Frost's and Conrad's views about the influence of nature on the life of a man.
- ix. Work in groups and find out the way in which natural phenomena operates on the human mind according to William Wordsworth and Coleridge. Do consult the poems you have read in the previous semester.

### **2.4. Extension**

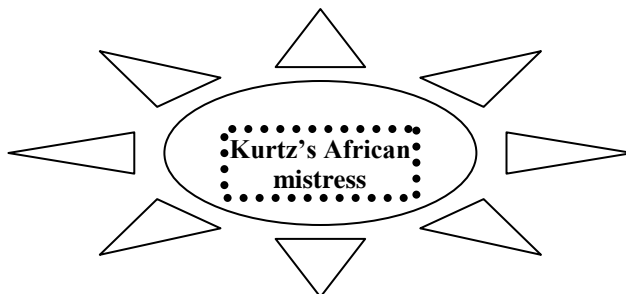
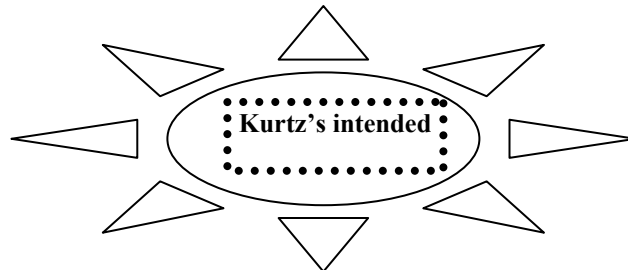
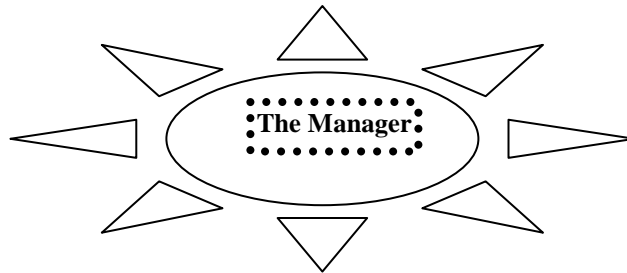
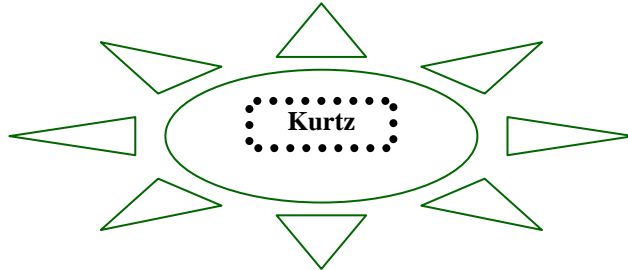
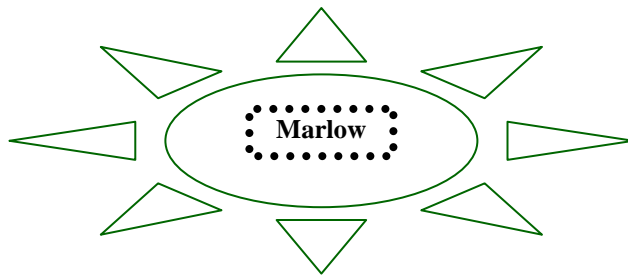
- i. How far do you think can evil within man be nurtured or subdued according to Wordsworth and Coleridge?

- ii. Have you ever been to an outcast without any social check and admonitions of parents and teachers? How did you feel about the moral values you have learnt at school and at home? Did you feel behaving like Kurtz or in some other way?
- iii. Do you agree with Conrad's concept that evil forces predominate man in the absence of admonitions innate to a civilized society?
- iv. Imagine yourself at Kurtz's place and situation and describe your experiences. What would have happened to you in that wilderness and the place so far off from the Western civilization? Do consider the type of education you and Kurtz has got and discuss how will you act or react to it? In order to support your point of view do refer to the lives of certain people who have lived and stayed in that area from certain authentic sources?
- v. Read Edward Said's essay "Culture and Imperialism" and act out an interview of J. Conrad by Edward Said.

### **3. Characters**

#### **Reviewing the Text**

- i. Work in groups, read the novel again and complete the Mind Maps below to illustrate the characters keeping in mind their role, appearance, personal traits, symbolic significance, their viewpoints, how do other people in the novel think about them? Do pick out the textual phrases and sentences that describe them well.



Do write a brief character sketch of these characters in the novel.

- ii. Work in groups and note down other important characters in the novel *Heart of Darkness*. Do include their role, appearance, personal traits, symbolic significance, and their viewpoints, how do other people in the novel think about them? Do pick out the textual phrases and sentences that describe them well.
- iii. Discuss in groups and write a brief description of these characters.

### **3.2. Shaping Interpretations**

- i. Consult *Style in Fiction* and *Dictionary of Literary Terms* and make a check list of the main characteristics of the art of characterization in a novel and apply them on the novel *Heart of Darkness*. Discuss within the groups the salient features of Conrad's art of characterization and estimate in what way does it differ from the traditional characterization?
- ii. Discuss within groups and trace the differences and resemblances between Marlow and Kurtz. Do include the points discussed in Activity 4.1.i.
- iii. Work in groups. Estimate whether the characters of the novels are suitable for the themes Conrad has depicted?

### **3.3. Making Connections**

- i. Work in groups and trace out the salient features of Fielding's, Jane Austen's, Dickens', Hardy's and G. Eliot's art of characterization and then compare Conrad's art of characterization with these novelists.

### **3.4. Extension**

- i. Work in group and rewrite the novel making the character of Kurtz's "intended" stronger, prominent and more expressive?
- ii. Discuss in groups and plan a meeting between the pilgrims in *Chaucer's Canterbury Tales* and travelers in *Heart of Darkness* and write a report on it.

## **4. Plot**

### **4.1 Reviewing the Text**

- i. Work in groups of 5-6. Read the three sections of the novel within the groups and create a flow chart to illustrate the sequence of the key events in the story from the novel *Heart of Darkness*. You may adopt any form of flow chart to heighten the visual effects
- ii. By using the flow chart, write a brief summary of section 1, 11 and 111 of the novel. Do share your summary with the rest of the class.

### **4.2. Shaping Interpretations**

- i. Discuss within the group how far does the sequence of events dramatically affect the outcome?
- ii. Consult the book *Style in Fiction* and *Dictionary of Literary Terms* and make a check list of the main characteristics of the plot of a novel and apply them to the novel *Heart of Darkness*.
- iii. Discuss within the group to what extent the novel contains these characteristics.

### 4.3. Making Connections

- i. Watch the film version of the novel, note down the necessary changes made by the director. Trace the differences between the film and the original text and discuss how far it is successful in attaining the desired effects.

### 4.4. Extension

- i. Adopt the plot of the novel *Heart of Darkness* for writing a film script.
- ii. Work in groups and rearrange the key events chronologically. Discuss the consequent changes in groups. What effect will the chronologically sequenced plot have on readers' mind?

## 6.a. Symbolism

### 6.1. Reviewing the Text

- 1.a. Work in groups, read the novel and fill in the 1<sup>st</sup> three columns of the table

below:

Colours	1. People and objects	2. Reference to the context & Page No.	3. Textual Phrases	4. What do they mean
Black				
White				
Off white				
Yellow				
Grey				
Multi-Colour				

- i. Use the glossary / dictionary of literary terms/ encyclopedia of literature and find out what is symbolism?
  - ii. Discuss in groups and decide the symbolic meaning/ significance of the objects in the novel and write it down in the 4th column.
  - iii. Discuss in groups how do they help a reader to predict future action / fate of the characters in the novel?
  - iv. How many times these objects appear in the text and what variations do you find in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> occurrences?
  - v. Keeping in mind the filled in table and the discussion, write at least one paragraph about each of these objects.
- 1.b.** Work in groups and fill in the 1<sup>st</sup> two columns of the table.

<b>Objects</b>	<b>1. Reference to the context &amp; Page No.</b>	<b>2. Textual Phrases</b>	<b>3. What do they mean</b>
<b>Jungle</b> <b>Flies</b> <b>Two hens</b> <b>Rivets</b> <b>Grass</b> <b>Sunshine</b> <b>The stick</b> <b>Oil painting</b> <b>Shoes</b> <b>Candle light</b> <b>Ivory</b> <b>Fog</b> <b>Twilight</b> <b>Kurtz's bald head</b> <b>Heads on the stakes</b> <b>Ornaments of the savage &amp; silent woman</b>			

- i. Discuss in groups the effects of these objects on the mind of the readers and decide their symbolic significance in the novel.
- ii. Discuss how do they help a reader to predict the future action/ fate of the characters in the novel?
- iii. Keeping in mind the discussion fill in the 3<sup>rd</sup> column.
- iv. With the help of the table above, write a brief note on these objects and their symbolic meaning.

### **6.2. Shaping Interpretations**

- i. How many times the objects mentioned in i. a. & vii b. appear in the text?
- ii. What variations do you find in their 2<sup>nd</sup> and 3<sup>rd</sup> occurrences?
- iii. How far do you find them appropriate in the general framework of the novel?
- iv. How far do you think the symbols that Conrad used in the novel performed their intended role?
- v. Can the novel produce the same effects without these symbols?

### **6.3. Making Connections**

- i. Read the critical analysis of the novel *Heart of Darkness* and find out the symbolic interpretations of these objects by different critics.
- ii. Discuss in groups and decide how far do you agree with their interpretation?
- iii. What alternative symbols would you use within this framework?
- iv. Will your choicest symbols affect the total meaning of the text?

#### **6.4. Extension**

- i.** Choose a certain passage from the text in which these symbols are used and then rewrite the text by replacing these symbols with that of your own.
- ii.** Discuss what broader meaning and effects will your choicest symbols produce?
- iii.** Write a detailed report on the findings of these discussions.

### **6.b. Impressionism**

#### **6.1. Reviewing the Text**

- i.** Work in groups. Marlow captures the fleeting perceptions of different objects in the novel. Read the prescribed part of the novel and find out objects/people being described in the following lines:
  - “... a white –haired secretarial head but wearing a compassionate expression, appeared and a skinny forefinger beckoned me.”
  - “From behind that structure came out impression of pale plumpness in a frock\_coat.”
  - “Black shapes crouched, lay sat between the trees leaning against the trunks, clinging to the earth, half coming out, half effaced with the dim light, light, in all attitude of pain, abandonment, and despair.”
  - “These moribund shapes were free as air- and nearly as thin.”
- ii.** Read through the novel again and identify the passages, which depict Marlow’s deep and innermost thoughts. What effects do you think they create on the mind of the readers?

- iii. Read the novel *Heart of Darkness* and trace the phrases, sentences or extracts explaining Marlow's views about the art of story telling and write a brief summary of it.

## **6.2. Shaping Interpretations**

- i. Consult your notes taken for the exercise 5.i & ii and write a short note on the effects of the literary sequence of the incidents and the sensuous perceptions in the novel.
- ii. Consult the dictionary of literary terms and net sources to find out what is impressionism. Discuss in groups and prepare a checklist of the features of impressionism.
- iii. How far do you think Conrad followed the features of impressionism in his novel?

## **6.3. Making Connections**

- i. Consult the Encyclopedia Britannica, Americana, *Critical History of English Literature* by David Daiches, Internet and Encarta2006 to trace how closely the details of the exterior world have been depicted in the works of Thomas Mann, and Ford Madox Ford.
- ii. Read the *Inheritors* written jointly by Ford and Conrad and find out what particular aspects of impressionism have been discussed in it?

#### **6.4. Extension**

- i.** Replace yourself with that of Marlow and suppose you are traveling from your country to Africa and then write down your fleeting perception of the natives working under imperialism: their manners, language, land, forest, and river.
- ii.** Select a passage containing impressionistic devices from the text and replace it with that of your own perception of the object/s.
- iii.** Select some descriptive passages from the novel and find out the colour combination, the effects of light and shades on various objects and then paint the scene.

## Appendix H

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

### Romantic Peotry

Experimental Group

S.No	Pre-test	Post test	Difference	Dif-squar
1	50	90	40	1600
2	52	89	37	1369
3	51	88	37	1369
4	42	83	41	1681
5	44	87	43	1849
6	48	86	38	1444
7	43	81	38	1444
8	40	79	39	1521
9	42	67	25	625
10	41	69	28	784
11	43	62	19	361
12	40	65	25	625
13	42	66	24	576
14	42	70	28	784
15	43	60	17	289
16	42	71	29	841
17	40	65	25	625
18	41	66	25	625
19	42	69	27	729
20	43	67	24	576
21	41	66	25	625
22	44	69	25	625
23	40	66	26	676
24	40	72	32	1024
25	39	59	20	400
26	30	56	26	676
27	45	57	12	144
28	49	67	18	324
29	43	62	19	361

30	41	60	19	361
31	30	57	27	729
32	40	66	26	676
33	38	67	29	841
34	28	58	30	900
Sum	1419	2362	943	28079
Average	41.73529412	69.47058824	27.73529412	825.8529412

Formula  $t = \frac{d}{n} \sqrt{\frac{d \times n}{n-1} \left[ \sum \frac{d^2}{n} - \left( \frac{\sum d}{n} \right)^2 \right]}$

	$n/n-1 =$	1.03030303	
	$\sqrt{n} =$	5.830951895	
	$\sqrt{n * d} =$	161.7231658	
	$\sum d^2/n =$	825.8529412	
	$(\sum d/n)^2 =$	769.2465398	27.73529412
$\sum d^2/n - (\sum d/n)^2$		56.60640138	
$\frac{n/n-1}{1} [\sum d^2/n - (\sum d/n)^2]$		58.32174688	
$\frac{n/n-1}{1} [\sum d^2/n - (\sum d/n)^2]$		7.636867609	
$z =$		21.17663603	

## Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

## Romantic Peotry

## Control group

S.No	Pre-test	Post test	Difference	Dif-squar
1	52	60	8	64
2	51	63	12	144
3	50	52	2	4
4	43	50	7	49
5	45	51	6	36
6	43	50	7	49
7	40	47	7	49
8	41	51	10	100
9	43	50	7	49
10	41	47	6	36
11	41	45	4	16
12	39	45	6	36
13	41	52	11	121
14	42	55	13	169
15	45	50	5	25
16	46	53	7	49
17	40	48	8	64
18	42	50	8	64
19	41	52	11	121
20	40	50	10	100
21	43	56	13	169
22	40	52	12	144
23	44	60	16	256
24	39	46	7	49
25	38	42	4	16
26	30	32	2	4
27	43	36	-7	49
28	46	35	-11	121
29	35	35	0	0
30	43	25	-18	324
31	32	38	6	36
32	33	40	7	49

33	35	41	6	36
34	30	33	3	9
Sum	1397	1592	195	2607
Average	41.08823529	46.82352941	5.735294118	76.67647059

Formula

$$t = \frac{d}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$n/n-1 = 1.03030303$$

$$\sqrt{n} = 5.830951895$$

$$\sqrt{n * d} = 33.4422241$$

$$\sum d^2/n = 76.67647059$$

$$(\sum d/n)^2 = 32.89359862 \quad 5.735294118$$

$$\sum d^2/n - (\sum d/n)^2 = 43.78287197$$

$$n/n-1 \quad [\sum d^2/n - (\sum d/n)^2] = 45.10962567$$

$$\sqrt{n/n-1 \quad [\sum d^2/n - (\sum d/n)^2]} = 6.716369977$$

$$z = 4.979211124$$

## Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

## Romantic Peotry

S.No	Pre-test	Pre-test	Difference	Dif-squar
	Experimental	Controlled		
1	50	52	-2	4
2	52	51	1	1
3	51	50	1	1
4	42	43	-1	1
5	44	45	-1	1
6	48	43	5	25
7	43	40	3	9
8	40	41	-1	1
9	42	43	-1	1
10	41	41	0	0
11	43	41	2	4
12	40	39	1	1
13	42	41	1	1
14	42	42	0	0
15	43	45	-2	4
16	42	46	-4	16
17	40	40	0	0
18	41	42	-1	1
19	42	41	1	1
20	43	40	3	9
21	41	43	-2	4
22	44	40	4	16
23	40	44	-4	16
24	40	39	1	1
25	39	38	1	1
26	30	30	0	0
27	45	43	2	4
28	49	46	3	9
29	43	35	8	64

30	41	43	-2	4
31	30	32	-2	4
32	40	33	7	49
33	38	35	3	9
34	28	30	-2	4
Sum	1419	1397	22	266
Average	41.73529412	41.08823529	0.647058824	7.823529412

Formula

$$t = \frac{d}{n-1} \sqrt{\frac{d \times n}{\sum d^2/n - (\sum d/n)^2}}$$

$n/n-1 =$	1.03030303	
$\sqrt{n} =$	5.830951895	
$n * d =$	3.772968873	
$\sum d^2/n =$	7.823529412	
$(\sum d/n)^2 =$	0.418685121	0.647058824
$\sum d^2/n - (\sum d/n)^2 =$	7.404844291	
$n/n-1 [\sum d^2/n - (\sum d/n)^2]$	7.629233512	
$\sqrt{n/n-1 [\sum d^2/n - (\sum d/n)^2]}$	2.762106716	
$z =$	1.365975055	

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

### Romantic Peotry

S.No	Post test	Post test	Difference	Dif-squar
	Experimental	Controlled		
1	90	60	30	900
2	89	63	26	676
3	88	52	36	1296
4	83	50	33	1089
5	87	51	36	1296
6	86	50	36	1296
7	81	47	34	1156
8	79	51	28	784
9	67	50	17	289
10	69	47	22	484
11	62	45	17	289
12	65	45	20	400
13	66	52	14	196
14	70	55	15	225
15	60	50	10	100
16	71	53	18	324
17	65	48	17	289
18	66	50	16	256
19	69	52	17	289
20	67	50	17	289
21	66	56	10	100
22	69	52	17	289
23	66	60	6	36
24	72	46	26	676
25	59	42	17	289
26	56	32	24	576
27	57	36	21	441
28	67	35	32	1024
29	62	35	27	729
30	60	25	35	1225
31	57	38	19	361
32	66	40	26	676
33	67	41	26	676
34	58	33	25	625
Sum	2362	1592	770	19646
Average	69.47058824	46.82352941	22.64705882	577.8235294

Formula

$$t = \frac{d}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

n-1

$$\frac{n}{n-1} = 1.03030303$$

$$\sqrt[n]{n} = 5.830951895$$

$$\sqrt[n]{n * d} = 132.0539106$$

$$\sum d^2/n = 577.8235294$$

$$(\sum d/n)^2 = 512.8892734 \quad 22.64705882$$

$$\sum d^2/n - (\sum d/n)^2 = 64.93425606$$

$$\frac{n}{n-1} [\sum d^2/n - (\sum d/n)^2] = 66.90196078$$

---

$$\sqrt[n]{\frac{n}{n-1} [\sum d^2/n - (\sum d/n)^2]} = 8.179361881$$

$$z = 16.1447693$$

$\alpha$	0.01	0.05
34	2.7316	2.0504
72	2.6514	1.9960

one tailed test

$\alpha$	0.01	0.05
z	2.33	1.645

Two tailed test

$\alpha$	0.01	0.05
z		

## Fiction II

### Experimental

S.No	Pre-test	Post Test	difference	dif Square
1	<b>55</b>	89	34	1156
2	<b>54</b>	85	31	961
3	<b>57</b>	87	30	900
4	<b>51</b>	88	37	1369
5	<b>55</b>	87	32	1024
6	<b>50</b>	82	32	1024
7	<b>52</b>	78	26	676
8	<b>51</b>	88	37	1369
9	<b>50</b>	85	35	1225
10	<b>53</b>	87	34	1156
11	<b>51</b>	80	29	841
12	<b>50</b>	78	28	784
13	<b>52</b>	79	27	729
14	<b>53</b>	87	34	1156
15	<b>50</b>	82	32	1024
16	<b>51</b>	80	29	841
17	<b>53</b>	85	32	1024
18	<b>51</b>	78	27	729
19	<b>50</b>	85	35	1225
20	<b>51</b>	82	31	961
21	<b>51</b>	83	32	1024
22	<b>50</b>	85	35	1225
23	<b>53</b>	80	27	729
24	<b>51</b>	80	29	841
25	<b>53</b>	89	36	1296
26	<b>53</b>	81	28	784
27	<b>51</b>	67	16	256
28	<b>30</b>	62	32	1024

29	<b>29</b>	69	40	1600
30	<b>31</b>	70	39	1521
31	<b>32</b>	63	31	961
32	<b>27</b>	65	38	1444
33	<b>35</b>	70	35	1225
34	<b>40</b>	82	42	1764
sum	1626	2718	1092	35868
Mean	47.82352941	79.94117647	32.11764706	1054.941176

Formula

$$t = \frac{\sqrt{\frac{1}{n-1} [\sum d^2/n - (\sum d/n)^2]}}{\frac{\sum d^2/n}{n/n-1} - \frac{(\sum d/n)^2}{n/n-1}}$$

$n/n-1 =$	1.03030303	
$\sqrt{n} =$	5.830951895	
$\sqrt{n * d} =$	187.276455	
$\sum d^2/n =$	1054.941176	
$(\sum d/n)^2 =$	1031.543253	32.11764706
$\frac{\sum d^2/n}{n/n-1} - \frac{(\sum d/n)^2}{n/n-1} =$	23.39792388	
$\frac{[\sum d^2/n - (\sum d/n)^2]}{n/n-1} =$	24.10695187	
$\sqrt{\frac{[\sum d^2/n - (\sum d/n)^2]}{n/n-1}} =$	4.909883081	
$z =$	38.14275246	

**Poetry +Fiction**

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

Controlled

S.No	Pre-test	Post-test	Difference	Dif-Square
1	102	125	23	529
2	102	118	16	256
3	105	108	3	9
4	95	110	15	225
5	99	101	2	4
6	90	100	10	100
7	93	99	6	36
8	90	102	12	144
9	91	100	9	81
10	96	97	1	1
11	88	92	4	16
12	88	90	2	4
13	95	102	7	49
14	93	113	20	400
15	86	103	17	289
16	89	105	16	256
17	92	100	8	64
18	95	100	5	25
19	83	107	24	576
20	89	107	18	324
21	93	106	13	169
22	89	97	8	64
23	95	106	11	121
24	88	96	8	64
25	90	100	10	100
26	84	100	16	256
27	96	101	5	25
28	78	88	10	100
29	75	75	0	0
30	72	73	1	1
31	67	78	11	121
32	71	75	4	16
33	69	81	12	144
34	69	78	9	81
Sum	2997	3333	336	4650
Mean	88.14706	98.02941	9.882353	136.7647

d x n

Formula	$t = \frac{d}{n-1} \left[ \sum \frac{d^2}{n} - \frac{(\sum d/n)^2}{n} \right]$		
	$= \frac{n/n-1}{n}$	1.030303	
	$= \frac{n * d}{n}$	5.830952	
	$= \frac{\sum d^2/n}{n}$	57.62352	
	$= \frac{(\sum d/n)^2}{n}$	136.7647	
	$\frac{\sum d^2/n}{(\sum d/n)^2}$	97.6609	9.882353
n/n-1	$\frac{\sum d^2/n}{\sum d^2/n} - \frac{(\sum d/n)^2}{(\sum d/n)^2}$	39.10381	
n/n-1	$\frac{\sum d^2/n}{\sum d^2/n} - \frac{(\sum d/n)^2}{(\sum d/n)^2}$	40.28877	
n/n-1	$\frac{\sum d^2/n}{\sum d^2/n} - \frac{(\sum d/n)^2}{(\sum d/n)^2}$	6.347344	
	$z =$	9.078369	

$\alpha$	0.01	0.05
34	2.7316	2.0504
72	2.6514	1.9960

one tailed test

$\alpha$	0.01	0.05
z	2.33	1.645

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

## Fiction II

S.No	Pre-test	Pre-test	Difference	Dif square
	Experimental	Controlled		
1	<b>55</b>	50	5	25
2	<b>54</b>	51	3	9
3	<b>57</b>	55	2	4
4	<b>51</b>	52	-1	1
5	<b>55</b>	54	1	1
6	<b>50</b>	47	3	9
7	<b>52</b>	53	-1	1
8	<b>51</b>	49	2	4
9	<b>50</b>	48	2	4
10	<b>53</b>	55	-2	4
11	<b>51</b>	47	4	16
12	<b>50</b>	49	1	1
13	<b>52</b>	54	-2	4
14	<b>53</b>	51	2	4
15	<b>50</b>	41	9	81
16	<b>51</b>	43	8	64
17	<b>53</b>	52	1	1
18	<b>51</b>	53	-2	4
19	<b>50</b>	42	8	64
20	<b>51</b>	49	2	4
21	<b>51</b>	50	1	1
22	<b>50</b>	49	1	1
23	<b>53</b>	51	2	4
24	<b>51</b>	49	2	4
25	<b>53</b>	52	1	1
26	<b>53</b>	54	-1	1

27	<b>51</b>	53	-2	4
28	<b>30</b>	32	-2	4
29	<b>29</b>	40	-11	121
30	<b>31</b>	29	2	4
31	<b>32</b>	35	-3	9
32	<b>27</b>	38	-11	121
33	<b>35</b>	34	1	1
34	<b>40</b>	39	1	1
Sum	1626	1600	26	582
Mean	47.82352941	47.05882353	0.764705882	17.11764706

Formula

$$t = \frac{d}{n} \sqrt{\frac{d \times n}{\sum d^2/n - (\sum d/n)^2}}$$

$$n/n-1 = 1.03030303$$

$$\sqrt{n} = 5.830951895$$

$$\sqrt{n * d} = 4.458963214$$

$$\sum d^2/n = 17.11764706$$

$$(\sum d/n)^2 = 0.584775087 \quad 0.764705882$$

$$\sum d^2/n - (\sum d/n)^2 = 16.53287197$$

$$n/n-1 [\sum d^2/n - (\sum d/n)^2] = 17.03386809$$

$$\sqrt{n/n-1 [\sum d^2/n - (\sum d/n)^2]} = 4.127210692$$

$$z = 1.080381775$$

$\alpha$	0.01	0.05
34	2.7316	2.0504
72	2.6514	1.9960

one tailed test

$\alpha$	0.01	0.05
z	2.33	1.645

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

## Fiction II

S.No	Post test	Post-test	Difference	Dif square
	Experimental	Controlled		
1	89	65	24	576
2	85	55	30	900
3	87	56	31	961
4	88	60	28	784
5	87	50	37	1369
6	82	50	32	1024
7	78	52	26	676
8	88	51	37	1369
9	85	50	35	1225
10	87	50	37	1369
11	80	47	33	1089
12	78	45	33	1089
13	79	50	29	841
14	87	58	29	841
15	82	53	29	841
16	80	52	28	784
17	85	52	33	1089
18	78	50	28	784
19	85	55	30	900
20	82	57	25	625
21	83	50	33	1089
22	85	45	40	1600
23	80	46	34	1156
24	80	50	30	900
25	89	58	31	961
26	81	68	13	169

27	67	65	2	4
28	62	53	9	81
29	69	40	29	841
30	70	48	22	484
31	63	40	23	529
32	65	35	30	900
33	70	40	30	900
34	82	45	37	1369
Sum	2718	1741	977	30119
Mean	79.94117647	51.20588235	28.73529412	885.8529412

Formula

$$t = \frac{d}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$n/n-1 = 1.03030303$$

$$\sqrt{n} = 5.830951895$$

$$n * d = 167.5541177$$

$$\sum d^2/n = 885.8529412$$

$$(\sum d/n)^2 = 825.717128 \quad 28.73529412$$

$$\sum d^2/n - (\sum d/n)^2 = 60.13581315$$

$$n/n-1 * [\sum d^2/n - (\sum d/n)^2] = 61.95811052$$

$$\sqrt{n/n-1 * [\sum d^2/n - (\sum d/n)^2]} = 7.87134744$$

$$z = 21.28658644$$

## Poetry +Fiction

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

experimental

S.No	Pre-test	Post-test	Difference	Dif-Square
1	105	179	74	5476
2	106	174	68	4624
3	108	175	67	4489
4	93	171	78	6084
5	99	174	75	5625
6	98	168	70	4900
7	95	159	64	4096
8	91	167	76	5776
9	92	152	60	3600
10	94	156	62	3844
11	94	142	48	2304
12	90	143	53	2809
13	94	145	51	2601
14	95	157	62	3844
15	93	142	49	2401
16	93	151	58	3364
17	93	150	57	3249
18	92	144	52	2704
19	92	154	62	3844
20	94	149	55	3025
21	92	149	57	3249
22	94	154	60	3600
23	93	146	53	2809
24	91	152	61	3721
25	92	148	56	3136
26	83	137	54	2916
27	96	124	28	784
28	79	129	50	2500
29	72	131	59	3481
30	72	130	58	3364
31	62	120	58	3364
32	67	131	64	4096
33	73	137	64	4096
34	68	140	72	5184
Sum	3045	5080	2035	124959
Mean	89.55882	149.4118	59.85294	3675.265

Formula	$t = \frac{d}{n-1} \left[ \sum \frac{d^2}{n} - \frac{(\sum \frac{d}{n})^2}{n} \right]$		
	$= \frac{n/n-1}{n} \times d$	1.030303	
	$= \frac{n/n-1}{n} \times d$	5.830952	
	$= \frac{\sum d^2/n}{n \cdot d}$	348.9996	
	$= \frac{\sum d^2/n}{(\sum d/n)^2}$	3675.265	
	$\frac{\sum d^2/n}{(\sum d/n)^2} - \frac{(\sum d/n)^2}{(\sum d/n)^2}$	3582.375	59.85294
n/n-1	$\frac{\sum d^2/n}{[\sum d^2/n]} - \frac{(\sum d/n)^2}{(\sum d/n)^2}$	92.89014	
n/n-1	$[\sum d^2/n] - (\sum d/n)^2$	95.70499	
n/n-1	$[\sum d^2/n] - (\sum d/n)^2$	9.782893	
	$z =$	35.67448	

**Poetry +Fiction**

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

Controlled

S.No	Pre-test	Post-test	Difference	Dif-Square
1	102	125	23	529
2	102	118	16	256
3	105	108	3	9
4	95	110	15	225
5	99	101	2	4
6	90	100	10	100
7	93	99	6	36
8	90	102	12	144
9	91	100	9	81
10	96	97	1	1
11	88	92	4	16
12	88	90	2	4
13	95	102	7	49
14	93	113	20	400
15	86	103	17	289
16	89	105	16	256
17	92	100	8	64
18	95	100	5	25
19	83	107	24	576
20	89	107	18	324
21	93	106	13	169
22	89	97	8	64
23	95	106	11	121
24	88	96	8	64
25	90	100	10	100
26	84	100	16	256
27	96	101	5	25
28	78	88	10	100
29	75	75	0	0
30	72	73	1	1
31	67	78	11	121
32	71	75	4	16
33	69	81	12	144
34	69	78	9	81
Sum	2997	3333	336	4650
Mean	88.14706	98.02941	9.882353	136.7647

Formula	$t = \frac{d}{n-1} \left[ \sum \frac{d^2}{n} - \frac{(\sum \frac{d}{n})^2}{n} \right]$		
	$= \frac{1.030303}{n}$	1.030303	
	$= \frac{5.830952}{n * d}$	5.830952	
	$= \frac{57.62352}{\sum \frac{d^2}{n}}$	57.62352	
	$= \frac{136.7647}{(\sum \frac{d}{n})^2}$	136.7647	
	$\frac{\sum \frac{d^2}{n}}{(\sum \frac{d}{n})^2} - \frac{(\sum \frac{d}{n})^2}{(\sum \frac{d}{n})^2}$	97.6609	9.882353
n/n-1	$\frac{\sum \frac{d^2}{n}}{[\sum \frac{d^2}{n}]}$	39.10381	
	$-\frac{(\sum \frac{d}{n})^2}{(\sum \frac{d}{n})^2}$	40.28877	
n/n-1	$\frac{[\sum \frac{d^2}{n}]}{(\sum \frac{d}{n})^2}$	6.347344	
	$z =$	9.078369	

## Poetry +Fiction

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

Experi          Contro

S.No	Pre-test	Pre-test	Difference	Dif-Square
1	105	102	3	9
2	106	102	4	16
3	108	105	3	9
4	93	95	-2	4
5	99	99	0	0
6	98	90	8	64
7	95	93	2	4
8	91	90	1	1
9	92	91	1	1
10	94	96	-2	4
11	94	88	6	36
12	90	88	2	4
13	94	95	-1	1
14	95	93	2	4
15	93	86	7	49
16	93	89	4	16
17	93	92	1	1
18	92	95	-3	9
19	92	83	9	81
20	94	89	5	25
21	92	93	-1	1
22	94	89	5	25
23	93	95	-2	4
24	91	88	3	9
25	92	90	2	4
26	83	84	-1	1
27	96	96	0	0
28	79	78	1	1
29	72	75	-3	9
30	72	72	0	0
31	62	67	-5	25
32	67	71	-4	16
33	73	69	4	16
34	68	69	-1	1
Sum	3045	2997	48	450
Mean	89.5588	88.1471	1.4118	13.2353

$$\begin{aligned}
 \text{Formula } t &= \frac{d}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}} \\
 &= \frac{n/n-1}{n} \quad 1.030303 \\
 &= \frac{\sqrt{n * d}}{n} \quad 5.830952 \\
 &= \frac{\sum d^2/n}{n * d} \quad 8.231932 \\
 &= \frac{\sum d^2/n}{(\sum d/n)^2} \quad 13.2353 \\
 &= \frac{\sum d^2/n}{(\sum d/n)^2} \quad 1.99308 \quad 1.4118 \\
 &= \frac{\sum d^2/n}{(\sum d/n)^2} \quad 11.2422 \\
 n/n-1 &= \frac{\sum d^2/n}{(\sum d/n)^2} \quad 11.58289 \\
 \frac{n/n-1}{n/n-1} &= \frac{\sum d^2/n}{(\sum d/n)^2} \quad 3.403364 \\
 z &= \quad 2.418763
 \end{aligned}$$

## Poetry +Fiction

Two tailed test

$\alpha$	0.01	0.05
z	2.58	1.96

Experi                      Controlled

S.No	Post-test	Post-test	Difference	Dif-Square
1	179	125	54	2916
2	174	118	56	3136
3	175	108	67	4489
4	171	110	61	3721
5	174	101	73	5329
6	168	100	68	4624
7	159	99	60	3600
8	167	102	65	4225
9	152	100	52	2704
10	156	97	59	3481
11	142	92	50	2500
12	143	90	53	2809
13	145	102	43	1849
14	157	113	44	1936
15	142	103	39	1521
16	151	105	46	2116
17	150	100	50	2500
18	144	100	44	1936
19	154	107	47	2209
20	149	107	42	1764
21	149	106	43	1849
22	154	97	57	3249
23	146	106	40	1600
24	152	96	56	3136
25	148	100	48	2304
26	137	100	37	1369
27	124	101	23	529
28	129	88	41	1681
29	131	75	56	3136
30	130	73	57	3249
31	120	78	42	1764
32	131	75	56	3136

33	137	81	56	3136
34	140	78	62	3844
Sum	5080	3333	1747	93347
Mean	149.4118	98.0294	51.3824	2745.5000

Formula

$$t = \frac{d}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{n/n-1}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{1.030303}{n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{5.8309519}{n * d} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{299.60803}{\sum d^2/n} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{2745.5000}{(\sum d/n)^2} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{2640.1462}{(\sum d/n)^2} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{51.3824}{(\sum d/n)^2} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{105.3538}{(\sum d/n)^2} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{108.54635}{(\sum d/n)^2} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$= \frac{10.418558}{(\sum d/n)^2} \sqrt{\frac{d \times n}{[\sum d^2/n - (\sum d/n)^2]}}$$

$$z = 28.75715$$

