

## **C H A P T E R   3**

### **PLAN AND PROCEDURE**

## CHAPTER 3

### PLAN AND PROCEDURE

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*Can I reconcile my conviction of the overwhelming educational importance of Creativity, with my equally strong Conviction that there must be objective Criteria and assessment.*

*David Best.*

*I can't ken a charming fully blown yellow rose in the garden of English, if it is untend.*

*Walter J. Petty.*

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## CHAPTER 3

### PLAN AND PROCEDURE

#### 3.1. INTRODUCTION:

The present chapter deals with the methodology of the Study starting with the objectives framed, the sample and the sampling procedure, instrumentation, administration of the tests and the data collection, on validity and the reliability of the Student-teacher's questionnaire and finally the sort of statistics used for data-processing and analysis.

The present study comes under the category of applied research as it deals with an academic problem; and to the descriptive type of academic research adopting the Survey method of collecting, especially assessing and evaluating the data in large groups.

The research intended to describe the nature of the Creative-writing experience, the sources of the poet's inspiration and the components of creative-writing, both qualitatively and quantitatively also although to a small extent. The study also aims at assessing and identifying the creative-writing potential and ability of the student-teachers of English both individually and in groups.

Creative learning requires creative-teaching and there is no substitute or a short-cut and hence any reform in education should cover the objectives, methods and measurement of every subject field. But such a

reform should be preceded by an identification of the creative-writing ability of the students in every subject area. Thus an investigation into the creative writing process of the Creative writer and identification of the creative writing ability in student-teachers form the whole crux of the present problem of the study.

### 3.2. Scope and Limitations of the study:

The avenues of creativity are many - the Scientific, Mathematical, religious, political and aesthetic and hence its scope is wide and abounding. Therefore, the researcher has confined herself to a specific area both concept-wise that is creativity, and subject-wise that is the discipline, or field-wise, the area being English Education that is teaching of English at the teacher education level in India. As per the scope of the present study, although there are four significant strands in the creativity research such as the 'Person, Process, Press and the Product', the researcher has confined to only a two-dimensional study - Process and the Identification of the creative-writing talent. As per the sample of creative-writers, the researcher included both English and regional language writers for the sake of numbers and in view of the universality of the process of thinking and writing creatively. However, the following are the limitations:

1. The study is limited to the literary creativity of the aesthetics. It did not touch painting, music, sculpture, dancing etc.
2. It is confined to a specific subject, creative writing in English

in a foreign language context. It does not speak much about creativity in the Language arts or in the native speakers of English.

3. Language learning is the development of a set of skills such as listening comprehension, Speaking, Reading and Writing. But the researcher confined herself to the last skill that is writing only.
4. The study is not extended to the identification of creative-writing ability in all languages of India but only English as a second or a (f.L.) or foreign language.
5. The sample is not drawn from the whole body of the student-teachers but those of the English Methodology.
6. and lastly, it did not intend to study the creative-writing potential and actual ability in writing in different cultural set-ups deliberately as closed culture, open-culture and semi-open society. It only takes into consideration a representative sample from five cities which may have their own idiosyncratic features which might have some effect on the creative performance of the student-teachers.

### 3.3. The title of the Study:

'An investigation into the Creative-writing Process, and identification of the Creative-writing Ability in English, in student-teachers, in the intercultural connotation.'

### 3.4. Operational definitions of the terms used in the title of the study:

#### 1. The Creative-writing Process:

This implies the nature and the source of creative-writing as well as the four stages of Creative-writing Process as proposed by Wallas (1966) i.e. Preparation, incubation, illumination and verification.

#### 2. The Creative-writing Ability:

It comprises the Creative-writing Potential as well as the Creative-writing ability of composing a poem and writing an imaginative short story. The creative-writing potential stands for the innate capacity for creative expression which could be reflected in a favourable creative attitude, aptitude and early experience of creative writing, while the creative-writing ability refers to the actual performing ability in the poem and Short story writing.

#### 3. The Student-teachers:

This term refers to the would-be, or prospective teachers or students who are undergoing the B.Ed. (Bachelor of Education) Course or simply pre-service teachers, who are studying English Methods as one of their methods subjects.

#### 4. The inter cultural connotation:

This particular expression is used in a limited sense. The investigator does not intend whereby to probe into the question 'how various

types of cultures or societies - open, closed, or semi-open-nurture and nourish the creative-writing talent. It simply refers to the sample drawn from the five cities of India - Delhi, Calcutta, Bombay, Madras and Guntur - which may be having different cultural patterns, and therefore the student-teacher's writings must have reflected this cultural variation in their modes of thinking, experiences, habits and reactions incidentally. But the researcher does not want to take them into cognizance. However, the term culture is extended to mean a nation also since a small sample of student-teachers is drawn from the Sokota University, Nigeria.

Table 3.1. The Blue-Print of the Methodology adopted in the Present Study

Method: The Normative Survey

S.No.	Objective	Sample	Tools
1	To know what constitutes or comprises the creative-writing act or process from the adult experience of it.	1. The professional or the on-job writers in any language - native or foreign.	1. The Interview Schedule for the creative-writers, 2. The Writers' Opinionnaire.
2	To identify and classify the Creative-writing potential or an ability in the Student-teachers.	2. The B.Ed. or the student-teachers of English methodology - Guntur, Bombay, Calcutta, Madras and Delhi.	1. The student-teachers' Questionnaire, 2. Composing a poem, 3. Writing an imaginative story.
b.	To study the creative-writing potential and ability in a foreign cultural situation (Nigeria)	3. The Student-teachers of English Methodology of Sokoto, Nigeria.	
3	To know whether there is any correlation between the creative-writing Scores and the academic achievement marks obtained in their graduate examination in English	4. The student-teachers of India belonging to the five cities mentioned above.	1. The creative-writing potential and ability Scores, 2. The English achievement marks.
4	To know whether the following independent variables have any effect on the creative-writing scores - 1. Sex; 2. Medium of instruction; 3. the economic status; and 4. the parents' education.	The Indian Student-teachers of the five cities mentioned above belonging to English methods.	1. The creative-writing scores of the three tests, and 2. the four independent variables

3.5. The objectives of the Study:

The following four are the objectives of the present study.

1. To know what constitutes or comprises the creative-writing act or the process, from the adult experience of creative-writing.
- 2.a. To identify and classify the creative-writing potential and performance in the prospective teachers of English.
- 2.b. To study the creative-writing potential and performance of student-teachers of Nigeria in a foreign cultural context.
3. To know whether there is any correlation between the creative writing ability and English achievement, as per their marks in the English examination at the graduation.
4. To know whether the following variables - sex, medium of instruction, economic status and parental education - have any influence on the creative-writing potential and ability of the student-teachers.

3.6. The assumptions of the Study:

The following constitute the assumptions of the present study.

1. That creative potential may be universally present but one should have a creative-writing disposition to become a creative-writer.
2. that the process of creative writing could be studied by the opinions of the creative-writers.
3. that identification of the creative writing ability could be done by using the adult criteria of creative-writing.

4. that English language as a foreign language is no barrier for creative expression.
5. that a high creative-writing ability, student is not the same as the high academic achiever in English.
6. that the variables of sex, medium of instruction, economic status and parents' education may not have much influence on the creative potential scores of the student-teachers, but they may influence the creative writing ability of the student-teachers.

### 3.7. Sample and Sampling:

As the title indicates, the study requires three kinds of samples - 1. the sample of the creative-writers, 2. the sample of the student-teachers of India, and 3. the sample of the student-teachers of Nigeria.

#### 1. The Sample of the Creative Writers:

In order to study the first objective i.e. the creative-writing process, the sample of creative-writers is drawn from the large population of the on-job or professional writers. The criteria of selection being the popularity and name as a writer enlisted in the writers' list of the Sahitya Academies of Delhi, Calcutta, Hyderabad, Madras and Bombay and the 'Who is Who' books of the poets, novelists and story-writers in the American Embassy Library, Madras. There was no restriction of the country, medium and form of creative expression, since it was presumed

that the process of writing is the same whether one writes in India or abroad, English or in the mother tongue, and whether it is a poem or a novel.

About one hundred and fifty writer's opinionnaires were mailed to the writers abroad (U.S.A, U.K., Canada, Australia and Nigeria) and India; Some of the Indian writers were contacted personally in the local and in Delhi, Bombay, Calcutta and Madras too when the researcher went round for data collection.

But the return of the sample abroad is very little. Only one out of sixty seven creative-writers returned the opinionnaire (A.D.Hope from Australia), out of eighty three writers opinionnaires served or mailed in India, only forty four were returned duly filled up. But only thirty nine opinionnaires were selected for the purpose of the study since the rest of them were incomplete. Therefore, the total sample of the creative writers considered for the study was forty. The following table (3.1) would show the details.

Table 3.1 Details of the Writer's Sample.

S.NO.	Sample	Mailed or Served	Returns	Selected Sample for analysis
1.	Creative-writers(abroad)	67	1	1
2.	Creative-writers(India)	83	44	39
	Total	150	45	40

As regards the medium of expression the sample of forty creative-writers represent the following languages - namely Telugu, Bengali, Sanskrit, Tamil, Hindi, Marathi, English, and even French and German, either exclusively or along with other media. Table 3.2. would show the details.

Table.3.2. Sample 1: Creative-writers - Medium of Expression wise.

S.NO.	Medium of Expression	Number of Writers
1.	Telugu exclusively	15
2.	English exclusively	5
3.	Bengali exclusively	3
4.	Telugu and English	4
5.	Telugu and Sanskrit	2
6.	Tamil and English	1
7.	Hindi and English	2
8.	Bengali and English	2
9.	Marathi and Hindi	1
10.	Marathi and English	1
11.	English, Hindi, Sanskrit, Telugu, French, German	1
12.	Telugu, Hindi and English	1
13.	Hindi exclusively	2
Total		40

Sample. 1 is a stratified sample which includes writers from India as well as abroad, and their medium of expression includes both English and the regional languages of India.

Sample 2:

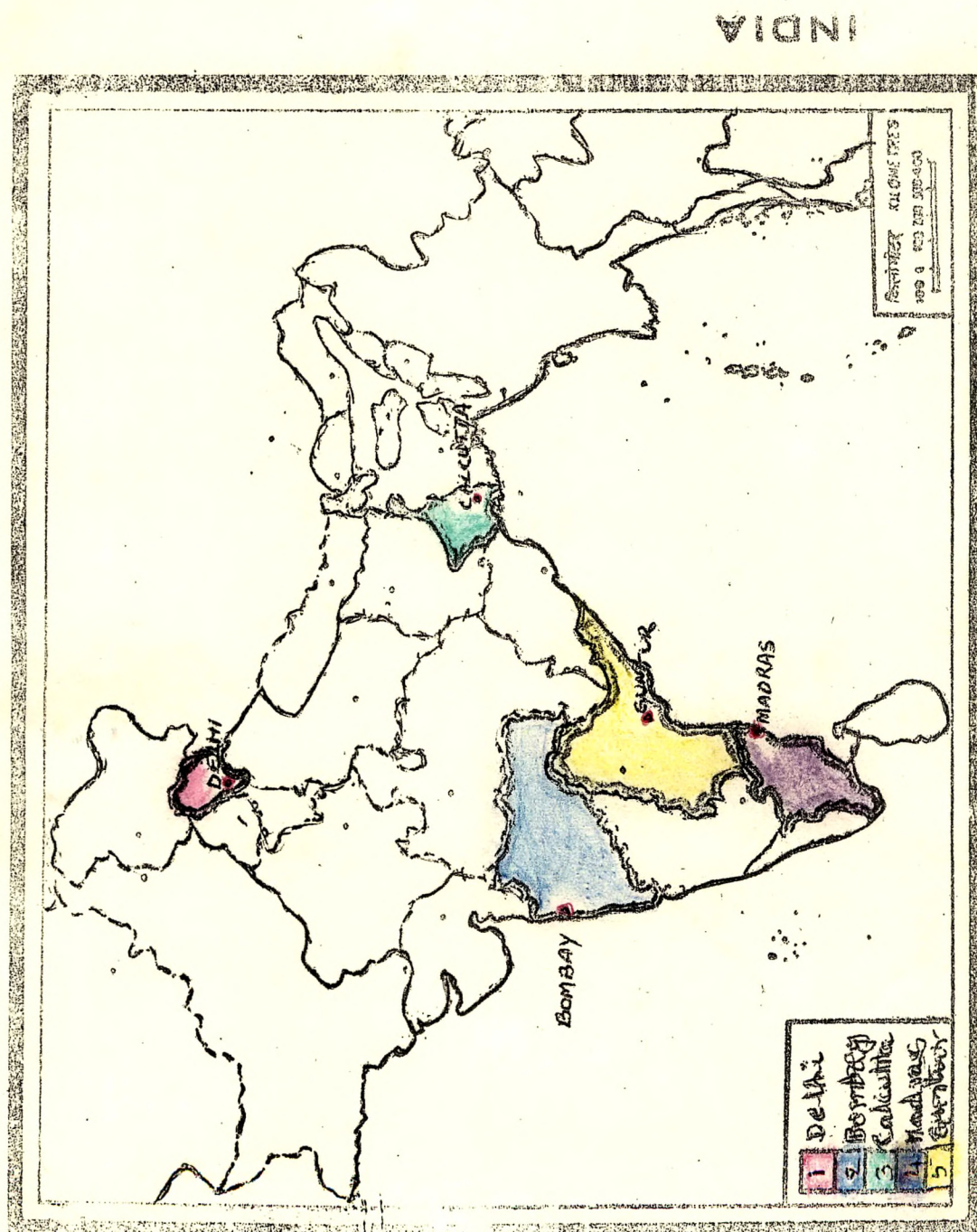
Since the second objective is identification of the creative-writing ability of the student teachers in English, the population of its study envisages the student-teachers, or the pre-service or the B.Ed. students who are doing English methodology. Naturally the sample is drawn from student-teachers of English Methods during the year 1984-1985.

The student-teacher sample is drawn from five cities - Delhi, Calcutta, Bombay, Madras and Guntur representing five different States - Delhi, West Bengal, Maharashtra, Tamilnadu and Andhra Pradesh. It is collected from twenty three different colleges of education and University departments which are of men, Women's and coeducation colleges.

The total sample collected from these twenty three colleges or University departments is 800. Out of which 752 sample (duly filled up) is selected for the purpose of the study. The following table 3.3. shows the details of Sample. 2.

Table:3.3. The Student-teacher's Sample

S.NO.	Sample	Collected	Returns	Selected sample
1.	Student-teachers of English Methodology - India.	800	760	752



Map - 1. Delhi, Bombay, Calcutta, Madras and Gujerat.

The following table 3.4. shows the particulars regarding the sample distribution among the five cities:

Table. 3.4: The student-teachers of India - The State-wise sample.

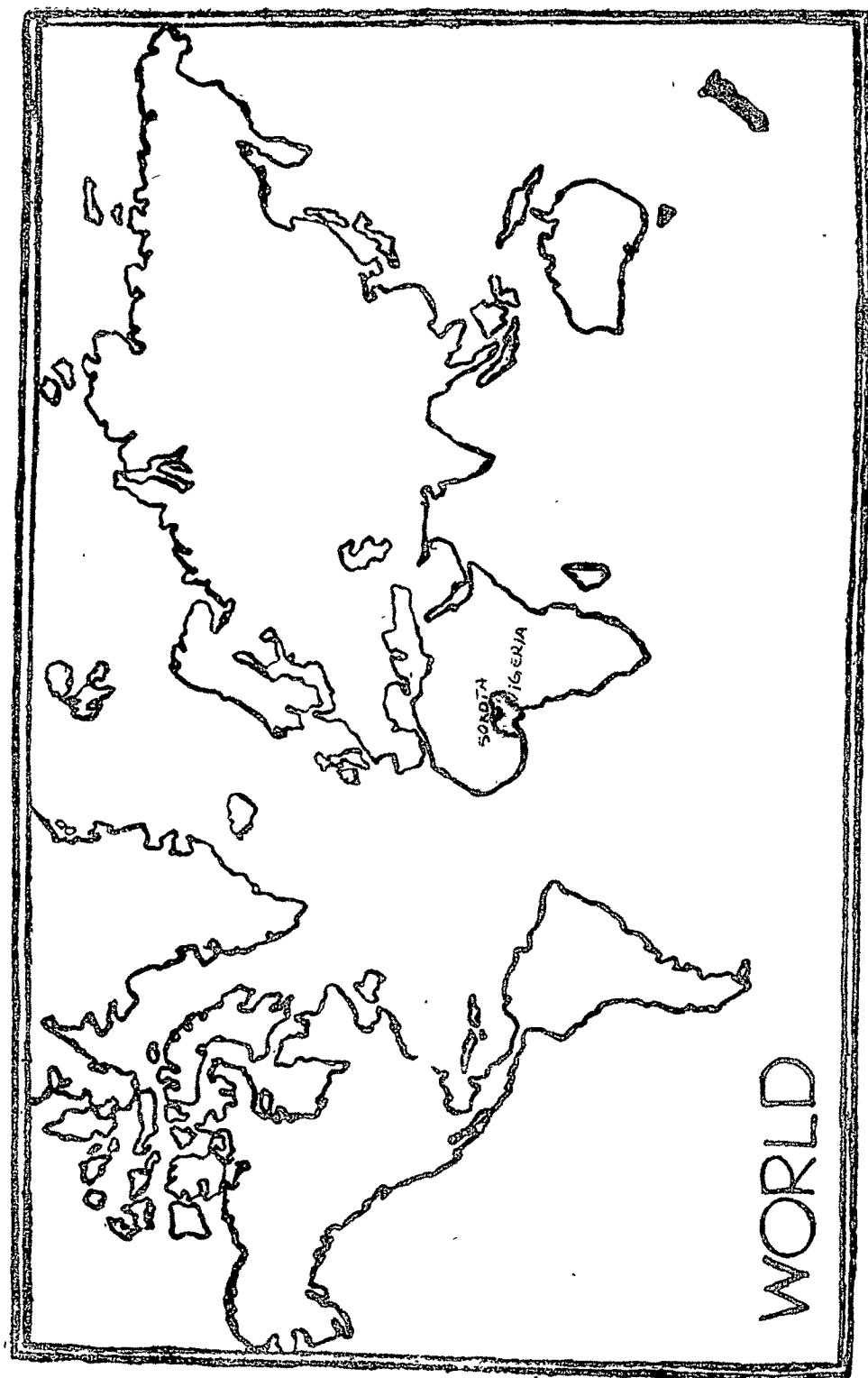
S.NO.	State	City	No.of colleges	Sample
1.	Andhra Pradesh	Guntur	2	198
2.	Tamilnadu	Madras	5	190
3.	Maharashtra	Bombay	8	160
4.	West Bengal	Calcutta	6	168
5.	Delhi	Delhi	2	36
Total			23	752

The sample of the student-teachers is also a stratified sample, which represents five cities in India - North, South, East and West, and covers different types of colleges - men, women and coeducation and different universities.

#### Sample. 3: The Nigerian Student-teachers of English

The Nigerian Sample of the student teachers of English facilitates the identification of the creative-writing ability in a foreign cultural connotation. The sample consists of the student-teachers doing English methodology in the University of Sokoto. All the sample was taken in tact. so it is a direct sample.

Map 2: Sokota (NIGERIA)



The total sample obtained was 250, but only a sample of fifty was selected since only fifty student teachers attempted two tools. The details of which are furnished in table 3.5.

Table 3.5: Sample 3: The Student-teachers of Sokota, Nigeria.

S.No.	Sample	Mailed	Returns	Selected Sample
1.	Sokota (Nigeria)	250	225	50
			Total	50

The Nigerian student-teachers did not attempt the third tool that is composing a poem.

### 3.8. Instrumentation:

Instrumentation is nothing but the preparation and use of the research tools. There is an intrinsic relationship between the objectives, the tools and the data gathering. The objectives direct the type of research tools to be used, which in turn yields the required data for processing and analysing the objectives. Figure. 3.1. illustrates the relationship between them.

Figure 3.1: The relationship between the objectives, tools of research, and the data.

The present study employed four important tools: 1. The Writers' opinionnaire, 2. The Student-teachers Questionnaire, 3. Composing a poem, and 4. Writing an imaginative short-story. The objective-wise instrumentation for the sample groups is shown in table number 3.5.

Table 3.5: Objective-wise tools for the sample groups.

S.NO.	Tool/Source	Objective	Sample	Developed/ original
1.	The Writers' opinionnaire	Studying the Creative-writing process	The creative writers	Developed
2.	The Student-teacher's Questionnaire	Identification of the creative-writing Potential	The Student teachers of English-India and Nigeria.	Developed
3.	Composing a poem	Identifying the creative-writing ability	same as above	adopted
4.	Writing an imaginative Short-story	"	"	"
5.	The Bio-data Sheet	Relationship between creative writing ability and English achievement	"	developed
6.	"	Relationship of creative-writing potential and ability with Sex, medium of instruction economic and parent educational background.	"	developed

The first four tools are selected to measure the first and second a. and b. objectives. While the bio-data sheets are used as sources for the

third and fourth objectives to gather the English achievement marks and to screen the variables of sex, medium, economic status and parents education.

The above mentioned four developed tools are discussed below under four specific headings - 1. the relevance of the tool, 2. the preparation 3. the contents, and lastly, 4. the scoring key used.

Tool-1: The Writer's opinionnaire or An Attitude Scale:

Relevance of the tool:

An opinionnaire is the information form which attempts to measure the attitude or the belief of an individual regarding a particular subject, through writing and hence belongs to the same category of self-reporting technique. His attitude is inferred by his opinions. The researcher in order to study the process of creative writing, She prepared an Opinionnaire to obtain the opinion bank of the creative-writers.

Preparation:

But first the researcher prepared a structured Interview Schedule which is open-ended after the model of Barron (1969) (Appendix NO. ). She interviewed about twelve creative-writers and took their written statement along with a note of their opinions that emerged in the course of conversation. But found a few limitations of too free response, long time, digressions and less number. Hence she prepared the Writer's opinionnaire basing upon the responses elicited from the above twelve

writers. She used the Likert method of summated ratings. Accordingly she provided a number of responses under each question or statement and asked the writer to mark his choice or choices from out them: After preparing the writer's opinionnaire, she showed it to a few experts in the N.C.E.R.T., (The National Council for Educational Research and Training), the CIEFL (The Central Institute of English and Foreign Languages) Hyderabad, two tutors in the Exeter University (U.K.), and a few researchers have worked on the similar problem and even served to a few writers to know about the difficulty and clarity of the items used. The opinionnaire eventhough it is closed mostly, a column is left for the respondent to allow for his own opinion which is not covered by the choices.

#### Contents of the writers' Opinionnaire:

The Opinionnaire of the writers is divided into five sections representing five areas of the Creative-writing Process Dimension (Appendix No.1 ).

Section A records the writer's bio-data calling for his literary contributions, awards and prizes; his hobbies, academic stand, distinctions and awards in the school or college and his family creative inheritance if any. This section yields the biographical and academic features which must have been peculiar to the writers only and hence would be helpful to describe his biographical, academic and intellectual background.

Section B of the writers' opinionnaire consists of the questions, twelve in number, mostly relating to the process of writing. The following items would illustrate the nature of this section.

Table. 3.6: Writers' Opinionnaire - Sample Items

S.No.	Sample Items
1.	What makes you write a poem mainly? a) money b) fame c) love and enjoyment d) therapy e) desire for expression and communication f) Creative Ego g) Any other? _____
2.	What was your first experience of writing like? Or Describe your awareness of creativity for the first time in brief.
3.	What are the themes that provide you encouragement or serve as motives for expression? (Tick them) a) Nature b) person c) patriotic feelings d) intimate love e) internal conflict f) discontent with life g) any other?

As seen in the examples, the researcher provided the probable answers collected under each question sounding the opinions of the phi-

losophers, psychologists, sociologists and the past creative writers. The contemporary writer (the subject) is required to simply mark his choices from the list. Therefore, it is a closed question which facilitates the researcher to sort out and analyse the responses easily. But however, one column is left free for the writer to write his response which is not covered by the choices, under the term 'any other'\_\_\_\_\_. Besides, as seen in the second example given, the researcher used some open-ended questions which require the most subjective, personal and original form of feeling, experience or expression which is qualitative and descriptive in nature.

Section C also follows suit with regard to the styling of the questions which are related to the meaning, the concept and the definition of Creativity and the stages and sources of Creative Expression. The following are the examples:

Table. 3.7: Section 'C'

Writers' Opinionnaire

S.NO.	Sample Items
1.	What is the meaning of Creativity according to you? (Tick out the appropriate answers) a. to invent b. to innovate c. problem-solving

- d. Adventurous thinking
  - e. to create something unique and novel
  - f. divergent thinking
  - e. any other
2. How do you consider the Creative-writing potential? (Tick out on the scale provided)

	To a great Extent	To some Extent	To a small Extent	Not At All
a. Hereditary				
b. acquired				
c. a talent rare				
d. mysterious				
e. intuition				
f. any other				

As seen from the sample items, the closed system facilitates the researcher to arrive at right response, the column 'any other' provides new responses and insights not foreseen by the researcher, and the open-ended question accommodates the most descriptive, personal experiences and feelings. The researcher also provided a four-point scale against some responses which determines the level of agreement or disagreement of the writer on the response. And also, the technique does not expect one rigid answer, rather a multiple response, because Creative-writing is deemed to be the synthesis of many ingredients or factors.

Table.3.8: Section 'D'  
The Writers' Opinionnaire

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1. What should be the Components of a Creative piece of writing according to you? Mark your choices		
1. Sensitivity	}	
2. Originality	}	
3. Fluency	}	The Cognitive elements.
4. Flexibility	}	
5. Elaboration	}	
6. Imagination	}	
7. Fantasy	}	Psychological
8. Symbolism	}	
9. Humour	}	
10. Mood	}	Affective (Emotional)
11. Playfulness	}	
12. Imagery	}	Cognitive
13. Figurative expression	}	
14. Openness to experience	}	Psychological
15. Thought Content	}	Cognitive
16. emotion	}	Affective
17. Any other	}	

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The formal or the structural elements are not listed as they don't

contribute to the creative expression but to the physical shape and decorum of the poem or a story or a novel etc.

The second question is as follows:

2. Which of the following do you think is the dominating factor or factors in creativity. Put a tick mark.

	To a Great extent	To some extent	To a Small extent	Not At All
a. Intellect				
b. Knowledge of the elements				
c. Biological in- heritance				
d. heart or emotion				
e) Both intellect and heart				
f. intuition				
g. unknown				

This section is very useful for the researcher or any lover of fostering creativity in children because it furnishes the criteria and the constituents of creative-writing on the basis of which the creative writing ability or the amateur talent can be identified, and measured.

The last Section 'E' of the Writers' Opinionnaire, which purports to to measure the first dimension of the Creative-writing process of the

present study, enlists, questions on the writer's reaction to the public criticism, the probability of nurturing and identifying the Creative-writing Ability in the youngsters. The following questions would illustrate the style of it.

Table. 3.9: Section 'E' of the Writers' Opinionnaire

S.NO.	Sample Items			
1. How do you react to the public opinion of your writings?				
	To a great extent	To some extent	To a small extent	Not at all
a. Annoyed				
b. indifferent				
c. accept positively				
d. discard writing				
e. don't care at all				
f. Casual				
g. any other				
2. Which of the following statements do you agree with? Mark them in order of priority or liking.				
a. Life is but a game where, one man's loss is another man's gain.				
b. We are like Tennis balls tossed to and fro in the hands of gods.				
c. Good and evil after all, are two sides of the same coin.				
d. Of course, love is the binding and governing principle of the Universe.				

- e. It is in our mind whether to create a hell or a heaven.
  - f. What is religion? It is nothing but a cultivation of the basic values such as honesty, and integrity of mind and character.
  - g. No man but a blockhead ever wrote, except for money.
  - h. Help if you can otherwise restrain from harming.
  - i. Any other
- 

This last question of the Writer's Opinionnaire deserves special attention where the researcher, instead of asking what is your philosophy of life, provided certain observations made by some famous authors like Shakespeare, John Webster, John Milton, Samuel Johnson, including some other common sayings; and asked the subjects, i.e. the contemporary writers to tick out their choices. The choices of the lot would reveal the style of thinking, convictions or philosophy of life - whether it is a positive acceptance of life in toto, pessimistic, optimistic, whether he believes in the love principle of the universe, self-confident, whether a protagonist of basic values, business type or egalitarian in his outlook. This is only an inference and the trend of the responses would reveal not only the individual writer's philosophy but also that of the writers as a type or group.

#### The Scoring Procedure:

Since the opinions of the creative-writers are related to the process of creative-writing, it is qualitative in nature and mostly descriptive. However, since the marking of their choices in the opinionnaire

is like the preferential voting, or multiple response type the researcher did the quantitative analysis wherever it is possible in terms of percentages.

Tool-3: The Student-teachers' Questionnaire.

In order to identify the creative-writing potential in student-teachers of English, both India and Nigeria, the researcher developed a Questionnaire.

The general category of enquiry forms include the data-gathering, instruments which the respondent answers questions or responds to the statements in writing. A questionnaire is used when factual information is desired, and when opinions rather than facts are desired, an opinionnaire or an attitude scale is used as in the case of the writers' opinions.

### 3. The Student-teachers' Questionnaire:

It is a form of data-gathering instrument which has many advantages, over the other tools, provided it is carefully constructed and administered. The questionnaire can be administered to a large number of groups and most appropriate and easy for administration. It has also the facility of mailing, although if personally executed it yields certain benefits of clarification and knowing the emotional reaction of the subjects.

The Questionnaire has two distinct forms; the closed form and the open form.

Relevance of the tool:

The Closed Form:

It is that which calls for short, check responses. It is one way a restricted form, which involves marking simply either 'Yes' or 'No'; a short response or checking of an item from the given list of suggested answers or responses. There is one significant drawback in this type of questionnaire; that is, the respondent is rather constrained in his thinking as the probable answers are provided and there is no scope for a response which he feels valid. But on the whole, the 'Closed form of the Questionnaire is found to be advantageous as it is easy to fill out, takes little time, keeps the respondent on the subject: it is relatively objective and to some extent easy to tabulate and analyse.

The Open Form:

The Open Form or the unrestricted type of Questionnaire is one, that calls for a free response in the respondent's own words. Generally, it is worded in the form of a question. No clues are given, but it is thought to be very good for original response and greater depth is found in furnishing the references and reasons. But this form of questionnaire requires greater effort and time on the part of the respondent and hence the returns will be few. It is also difficult to interpret, tabulate and summerise such an information or item in the research report.

Nevertheless, the researcher used both the forms - the open and

closed - in the Student-Teacher's Questionnaire which is constructed for the purpose of identifying the creative-writing potential and the amateur talent in them and the items took both a question and a statement form.

#### Preparation of the Student-Teacher's Questionnaire:

As stated earlier the second dimension or the objective of the study constitute the identification of the Creative-writing ability in the student teachers of English Methodology on the basis of the criteria arrived at from the opinions of the creative-writers both current and past and from the survey of the literature in psychology. The Student-teachers' Questionnaire is developed on the model of Medhi's tests of creative thinking, Davis (1975) and Rimm (1980), Fisher and Terry, A Kumar and Wright. When it was ready it was administered to a group of twenty eight English methods students of the M.S.University of Baroda and checked the difficult and ambiguous , and repeated items, and then the final Questionnaire was printed.

The Student-Questionnaire consists of a hundred and thirty (130) statements arranged in five sections representing five aspects - 1. the personal data, 2. the student's attitude towards creative-writing, 3. their aptitude in it, 4. the previous experience; and 5. the creative environment. While the last section represents the environmental factor of creative-writing the previous three Sections B.C.D. which reflect the creative attitude, the aptitude and some previous experience in

writing creatively, are grouped to represent the Creative-writing Potential; while Section E includes the environment in the form of Home and School.

1. The Bio-data:

As such, to begin with Section A of the Questionnaire, it records the student's place, state, college, if forefather's writing, marks obtained in the previous degree and details of the sex, medium of instruction, the economic and educational home background. The details of the place, college and nationality will help computing the group means of college, place and the nation as a whole. The particulars regarding the forefather's writing speaks of the inheritance factor, while, the B.A. or B.Sc. Marks in English enable the researcher to study the correlation between the Creative-writing Scores and academic achievement. The details of sex, medium, economic and education of the parents, help assessing their effect on the creative-writing scores of the total sample.

Section B includes 26 statements concerning the likes, interests, urges and hobbies of the subject, which are related to the creative-writing ability. Their response will enable the researcher to measure their attitude towards the creative-oriented interests and activities. A positive and favourable attitude will reflect the motivational factor of creativity which would decide the disposition of the subject towards the creative-writing activities such as debates, elocutions, and writing to the magazines. M. Terman (1930) reports to have administered an 'Interest Bank' calling for the scholastic interests, occupational prefe-

rences and interests in miscellaneous activities. The preference ratings showed that gifted children were more interested in abstract subjects like literature, debating, dramatics and ancient history than in the practical subjects like manual training, drawing and painting in which the control group is interested in. The data showed that majority of the gifted children were inveterate readers interested in a wide range of books, interested in mystery and magic but not interested in the formalities such as attending the church. This section of the student Questionnaire is based on such research truths and especially based on the GIFFI-1 and GIFFI-2 of Rimm(1980). The section consists of twenty six items relating to the student-teacher's wishes, desires, likes and dislikes connected with creative expression. The subject is asked to mark his choice on the four-point scale as shown below.

Table:3.10. The Student - teachers' Questionnaire

S.NO.	Item	Scale			
1.	I want to write a poem	Always	- often	- occasionally	- Never
13	When I see a flower I would like to dissect and analyse its parts	-	-	-	-
22.	I prefer games to sports	-	-	-	-
23.	I would like to attend social functions	-	-	-	-

Items like the first one illustrates the creative urge or impulse of the student to express and write while, the second third and fourth items indicate the negative factors of creative writing attitude and inclination, because the second item reflects the scientific ability and the third and fourth statements speak of social interests and extraversion and interest in games which constitute the negative factors of the creative-writing attitude. (Such negative items are marked with asterisk in the questionnaire in Appendix)

#### Section C:

Section 'C' of the student-teachers' questionnaire consists the largest number of items, that is fifty three which indicate the aptitude of the student-teachers in creative-writing. The items reflect the components and characteristics of the creative-writing representing their potential or ability in this particular field. They include 1. the cognitive factors of Guilford, Torrence, Mackinon and others, 2. the psychological factors put forth by Freud, Kubie and Maslow, 3. the emotional or the affective factors professed by various poets and writers, and 4. the structural or the organisational factors which were deemed to be facilitators of the form of Creativity, but in a special way as related to creativity.

It is here that the opinion-pool of the creative writers which was secured quite in advance, was employed and used as a feed-back, which are both intellectual and non-intellectual to the Student-teachers questionnaire. The following table would show various components and factors reflected in the items of this section.

Table.3.14: Components of Creative-writing

1		2		3		4	
Cognitive Factors	Items No.	Affective or Emotional	Items No	Psychological	Items No.	Structural	Items No.
1.Sensitivity	1-41	1.fantasy	20-23	humour	34-41	1.rhythm	42-44
2.Originality	5-9	2.day-dreaming	33	2.sensitivity	1-4	2.rhyme	45-46
3.Fluency	10-12	3.playfulness	13-18	3.playing with words	13-18	3.metaphor	32
4.Flexibility	19-25	4.interest in Music	46-49				
5.Elaboration		5.humour	34-41				
6.Imagination	26-31						

Statements which reflect these factors are included but they have taken the B.Ed. content of the English Methodology - both theory and practice. The following examples would illustrate this concept:

Table.3.15 Section 'C' Sample Items of the Student Questionnaire.

No.	Item	Component-state
1.	I like excursions because I enjoy seeing beautiful things.	Sensitivity to - beauty
5	I would like to write the compositions	Originality

and essays on the subject of my own choice

10	I can speak English fluently	fluency
24	I follow old methods of teaching English (the Translation and Grammar Method and the Direct Method)	flexibility (Negatively tested)
26	I write my letters elaborately	elaboration
41	I tell jokes and make my friends laugh.	humour
42	I like to listen to the rhythmic cries of a nightingale or a cuckoo in spring.	Rhythm
51	I am lost in day-dreaming . .	day-dreaming.

---

The components and characteristics of creative expression which are believed to be contributing to the creative-writing ability or potential are thus inferred from the statements of this section as measures of creative-writing.

The only difference is that they take a literary connotation. For example, Sensitivity in scientific creativity means sensing the problem, while in literary creativity it means sensitivity or perception of beauty, feeling, truth sense perceptions such as taste, colour, touch, sound and sights. The student response to the above statements would decide his or her potential or aptitude for creative-writing. Speaking about the importance of aptitude for any field of creative expression, Best as mentioned earlier beautifully observes "No amount of coaching in technical skills will make a Wimbledon champion out of someone who simply lacks an eye for a ball." Therefore, knowledge of a person's aptitude for

a particular activity is quite essential to predict the future realisation or success of it. It however, does not imply that the scores on these items are sure indicators or predictors of creativity. They only affirm that the creative - writing potential does exist, which if, properly nurtured in an appropriate environment, may culminate into creative achievements or talent, for items as the above are deemed to be the denominators of creativity and it is presumed that creativity is the sum and bonum of these abilities, components or traits. This section on the whole testifies to the existence of the aptitude of the student - teacher for creative - writing and decides the career of a writer as in the case of Sarojini Naidu who, while struggling with a mathematical problem, a poem made its appearance, therefore unknown to her.

#### Section D of the Student - teacher's Questionnaire:

While Section B reflects the creative-writing attitude or disposition of the student-teachers, Section C, their aptitude for creative-writing, Section D, surveys the experience of creative writing in the past if any, amongst the student-teachers either at the school or college stage. Cox (1938) giving the case summaries of the early mental development of eighteen to twenty eight eminent authors represented in the Juvenile Productions, found that they have written poems and stories when they were young and their first productions emerged during the adolescent or teenage. And hence some of the student-teachers whose age range is nineteen to twenty five must have already felt the urge to write and so have been writing to themselves in their diaries or to college magazines

and journals. Such symptoms are sure indications of the creative-writing ability. Thus, it takes into account the amateur-talent in creative-writing. Besides this, this section of the Student-teachers' questionnaire also enlists the actual participation, not liking, of the student-teachers in the co-curricular activities such as debates, elocutions, essay-writing, word-building tests and prizes and awards won in them, and also reading their composition to radio broadcasts. But all these statements are closed type. There are four more questions which are open type enlisting the students environment or encouragement and influence of great writers.

The following are some examples.

Table.3.12: Previous experience in creative-writing.

Student-Teachers' Questionnaire-Section D

S.NO.	Item
4	I write articles to the college magazines and periodicals.
9	I won prizes in the school and college debates, elocutions and essay-writing competitions.
12	I write and read my own composition at the college functions.
13	I write to a radio-broadcast.
22	Which piece of writing inspired you most?
23	What characteristics do you like in your favourite writer mostly?

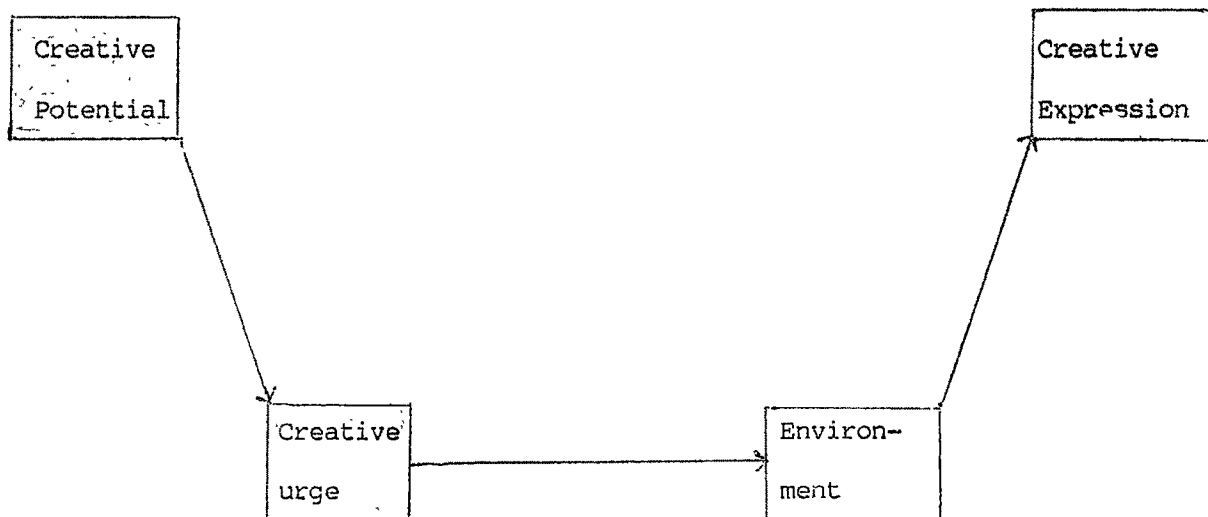
Thus, this Section 'D' detects the amateur talent in creative-writing and the inspiring or the motivating force in thier life. On the whole, this Section ensures that whoever is blessed with some talent and had some awareness of the creative urge or impulse, must have been already writing for self-expression sake in the early stage just as Milton, Shelly<sup>e</sup> and Mrs. Sarojini Naidu did. The number of items is 21. So the maximum score one can get is 63.

On the whole, Section B, C, and D together speak of the Creative-writing potential in the student-teachers of English, whether it is a favourable attitude, aptitude or have prior experience in creative writing - all culminating into the potential of creative-writing. The scores on all these three areas - the Mental disposition, creative-writing elements and first attempts of creative expression - the researcher prefers to call it for all statistical purposes as 'the creative potential'.

#### Section E:

"Full many a flower is born to blush unseen" says Thomas Gray. Yes, opportunity and environment are essential for creativity to bloom. Opportunity in the form of education and training, and environment in the form of the social milieu- the press, the society, the parent and the teacher. Creativity does not exist in the vacuum. It presumes the innate urge or the impulse to create, the potential which triggers in proper environment. The following figure will explain the kinship of them.

FIGURE 3.2. The Genesis of the Creative Expression.



This section although, it has nothing to do with the identification process of the creative writing potential, it records the encouragement given by the teacher as well as the parent. Although creativity is viewed as personal, innate, or latent source or potential in the sub-conscious mind, it should be awakened or roused by the environment and the teacher and parent constitute the immediate environment. Creativity did not simply occur in the past writers and does not happen in the vacuum; it should be detected, recognised and encouraged by the teacher and the parent. Best observes, "too often, education stifles creativity and individuality and consists merely in learning and regurgitating facts, so that students leave the education super-market with career-bag minds, neatly filled with pre-packed ideas." Environment is the motivating or the inspiring factor. A survey of the biography of the poets would reveal that some aunt or uncle or a friend encouraged the poet in his effort. Shakespeare was patronised by a duke, Samuel Johnson by a noble and Keats by a friend. Therefore, the attitude of the teacher and parent towards creative-writing would either enhance or inhibit the creative-writing ability in the student-teachers.

Section 'E' could be further shown in two parts - E the teacher's encouragement for the student-teacher and E the parent's encouragement. The former consists of sixteen items and the latter, only ten items. The responses would show whether there is any such encouragement from the two agents, and whether there is any correlation between the creative potential scores and environmental scores as per the teacher and parent's

encouragement. It would also reveal 'what is the actual position of creativity in the English class room? Whether the teacher inspires the student-teachers to write a poem or not, whether a certain freedom is allowed or not, whether the teacher herself has the awareness of it. The following items would illustrate the notion.

Table.3.13: The Student's Questionnaire Section E<sub>1</sub>

(The Teacher's encouragement factor)

S.NO.	Sample Items
1.	I am inspired by the readings of great poets by my teacher.
6.	My English teacher teaches me how to write a poem.
10	My teacher allows me some freedom to imagine and write an original story in my lesson plans.
11	My English teacher herself writes and reads a few of her works to the class.

Parent or home is the next important catalytic agent. "The best environment for enhancing creativity in the individual is home itself" says Arieti (1957). The case histories of Pisano, Mill, Johann Strauss, Ann Freud the daughter of Sigmund Freud, and many others provide good examples to this.

Section E<sub>2</sub> of the Questionnaire reveals what sort of home background is prevailing for the student-teachers. Items seventeen to twenty six record the attitude of the parents towards the creative activities of their children, whether they are rigid, egocentric and set high academic standards for their wards and whether anything different from the common is condemned, discouraged and dismissed as 'all fallacy and useless' or fallacious', which are considered to be the strong stiflers of creative potential and once curbed, it is thought highly doubtful, whether they can take off in the adult life. The following illustrate the style of the items:

Table.3.14: The Student-Questionnaire Section E<sub>2</sub>

The Parent's Encouragement

S.NO.	Sample Items
18	My parents are very particular about my ranks and grades.
23	I get a lot of reading material at home.
25	My parents appreciate my participation in the literary activities.

Thus, the student-teachers Questionnaire was aimed at identifying the creative-writing potential in the form of a favourable attitude, aptitude and prior experience in creative-writing. "But no single identification-instrument is sufficiently valid" says Davis (1975). Hence trying to predict the creative potential of the student teachers from the scores of the student-Questionnaire is like forecasting the

technical knowhow in order that the creative torrent takes a form or a shape. Therefore, it is ridiculous on the part of any researcher, or a teacher to ask the students straight away to write a story or a poem.

It is the motivation of self-actualisation and the urge and thrill of creative expression that the researcher aimed at in giving motivation talks on creative-expression. Because as Pradip observes, 'any human need when it is felt powerfully enough, can if the circumstances are favourable, precipitate an act of creation or an invention.' It is with this conviction that the researcher conducted a session of Motivation talks on literature.

Since the researcher selected two tests or media for creative-writing, she gave two talks on poetry and one on story-writing, allotting two periods for composing a poem and writing an imaginative story after each session. Altogether it was a five period motivation session.

On the first day the researcher spoke about the significance and value of literature both for pleasure purpose, beauty of expression and cultivation of moral and spiritual values, from the individual point of view and the society, both for cultivation of emotions and giving a message to the society. Then she produced several definitions of poetry with suitable illustrations. Later she discussed the origins of writing poetry and some conceptions and patterns or forms of writing a verse.

On the second day the researcher brought about the critical appreci-

ation of few famous poems, selected and got printed for the purpose under the title 'The Inspiring Pen'. Care has been taken that they represent and reflect famous poets like Milton, Shakespeare, William Wordsworth, Keats, Andrew Marvell etc., and also that they hit at certain passions and emotions of the reader such as love, hatred, despair, humour, beauty etc., and drawing attention to the universal human feelings for one never knows which passion - whether Hamlet's despair, and hatred or Shakespeare's love and humour or Wordsworth's beauty of nature would hit at the students passion and rouse the creative impulse, and certain techniques such as rhyme, music, metaphor, symbolism allegory etc. The session came to a close with an assignment giving, that is writing a small poem at home.

By this time the student-teachers of English Methods in the M.S.UNI-  
 versity of Baroda seemed to have been under a magic spell of the poetry  
 and got a little familiar with the basic elements of writing poetry.  
 Therefore, the student-teacher's mind was prepared and hence were asked  
 to compose a poem on the third day with proper instructions about the  
 form, style and techniques of writing (Answer sheet for composing a Poem  
 is in the Appendix). But what to write on? Some common basis, some  
 stimulating aid or object or a picture or a person should suggest the  
 theme and content of the poem. So after the model of Mednich (1976)  
 the researcher selected a beautiful scenery of a solitary boatman at  
 time of dusk with two trees bowing, with a caption underneath was hung.  
 However, the researcher told them not to worry much about the form and

rhyme and were called upon to reflect upon their own experience.

The student-teachers were asked to observe the details of the picture first and then close their eyes for some time and brood over the theme and then they were left to themselves to reverie and write. The time given was just half-an hour but was not followed rigidly. They were asked to get the clue and utilise the caption for their poem. The student-teachers who raised some resistance and a feeling of diffidence, now came out with their pieces of creative expression, experiencing a thrill and enjoyment as reported by them. It seems some of the students reported to their concerned Professor that they liked the sessions and found the experience of writing creatively, novel and thrilling.

The second session of motivation was about story-writing. On the fourth day the researcher spoke about the popularity and utility of the short-story both for pleasure and time-passing and discussed the general characteristics and techniques of a story-writing such as a good beginning, the middle and a surprising ending, interesting narration, indirect discription of beauty, effective and living characterisation, rousing curiosity, building suspense, climaxing action and resolving the knot, creating a mood, the technique of dialogue, humour, symbolism, imagining the incident, sustaining the interest etc. The session was ended with an assignment of writing about a short incident at home.

The next day a picture was hung, the instructions on the answer books were read and they were left to themselves in thinking about the plot and characterisation. The student-teachers however, were cautioned

about producing a known story. Once again half an hour's time was given. The picture used for stimulation was about a little boy and a furry animal like a Mongoose, with a caption that there are no barriers for friendship.' But unfortunately this picture led to many known children's stories knowingly or unknowingly, such as the little boy and the Mongoose, kindness to animals, the hasty mother and the squirrel. Instead of imagining a new theme or writing on original story, their mental association with the children stories led them to reproduce the same. The researcher also felt that the picture is too simple for the student-teachers and hence, a new picture was selected later for further sessions, where, two human figures and some indiscriminate figure were watching the sun-set in semidarkness.

Thus, the motivation strategy helped to capture the passion of the student-teachers by inspiring or triggering up the creative urge for expression, that bodied up a tragic or a romantic story, or a philosophic one. No two poems and stories of the student-teachers were alike and each found an expression to their own feelings, reactions, mental conflicts and social problems.

Tool 3- composing a poem:

A more and reliable statistic measures are required for the purpose and hence the researcher employed two more real-life creativity tests - they are composing a poem and writing an original story playing upon their own imagination. For, these tests are based on the assumption that, instead of measuring the creative potential indirectly through a

battery of tests, it is better to judge from the actual performance in the creative-writing exercises such as story and poem.

But why writing a poem or story alone while so many forms of literature are there! As mentioned earlier, people think of poems and stories when the expression 'imaginative-writing' is used, because in composing a poem and imagining a story theme, the writers try to express their ideas and experience in a unique and a highly personal way. There is also more scope for originality and imagination, and the writing of them require only basic skills.

What sort of poem is expected of the student-teacher:

The researcher in asking the subjects to compose a poem, is not expecting them to write a traditional or a conventional poetry with metre, rhythm as described in the first chapter. Nor is she asking them to confine themselves to an ode or sonnet or a ballad etc. It should sound as if it is a kind of exercise in writing. For a majority of the students this would be the first experience which is somewhat different from the routine of the English course. For some it would be the first awareness of the self and an experience of thrill, as expressed by the students of Baroda. And for some others, it is one more exercise in personal writing, if they have been already writing unofficially. Poetry should never be thought of as a versification of prose ideas. Poetry itself is an instrument of discovery, a means of exploration.

Also it is true that the researcher is not expecting 'an expertise'

or a sublime poetry of high imagination as in the case of Milton and Coleridge.

To be precise, what the subject is required to do in the creative-writing test-1 is, the expression of his feelings, desires and reactions without any restriction of former technique or give a vent to her or his own feelings and ideas, or ease her tension or urge for expression, which is called a 'free verse'. The researcher reduced many conventional devices and restrained the technical terms even in those instructions printed in the answer book, because it was thought, that too much insistence on form and technique may inhibit free expression.

But form or the technical devices cannot be completely ignored. With a professional writer the form is inherent. And with others, some form or the other should be encouraged for the expression to be compact and presentable and explicit. The content and emotion should be bodied in a form. And any emotional expression without a certain pattern or form would be just babbling or chattering.

But elementary techniques such as words, that make sounds, conveying pictures, planned repetition of words and phrases could be concentrated on. Otherwise, the very essence and spirit of the poem is gone to the winds. Therefore, the researcher pointed out certain instructions indirectly towards the form - the rhyme, the stanza form, imagery, symbolism and Metaphor etc. to the student-teachers.

Therefore, the following instructions are printed on the answer

sheet of test one:

1. Write a poem describing the details and expressing your own feelings, impressions or ideas on seeing the picture.
2. Write your poem in any stanza form you like (2 or 3 or 4 any number line stanza).
3. Use Rhyming words where you like.
4. Use beautiful images, symbolic expressions and comparisons that please you; and
5. Give a title or titles to your poem.

Thus, the researcher tried to draw their attention mainly to expression and communication of ideas and feelings and impressions of their own, seeing the poster and indirectly suggested some technicalities and structure of form which can be identified with 'free verse'. She also directed them, of course once again indirectly, to use some rhyming words or pattern - 'ending' or internal rhyming and some elements of poetry like symbolism, imagery and Metaphor. The last instruction helps to assess the fluency of ideas and an uniqueness too in giving a number of titles.

A picture for stimulation:

Since poem-writing is not done in a natural process, some stimulation or a starter is necessary to rouse the creative-writing-impulse in the student-teachers. Some object or person or inner feeling should stimulate the expression. Therefore, a beautiful scenery was selected by

the researcher for the purpose. The poster shows a boatman rowing the boat slowly at dawn or dusk. Two coconut trees are bending over the still waters. (Pictures furnished in the Appendix at the end.) And the caption underneath reads "Paddle slowly to get the most out of life" which suggests some basic theme or idea for the poem. The poster will not only serve as stimulation but also as the basis or uniform criteria for judgement.

#### Tool 4: Story Writing:

Yet another instrument devised for the purpose of identifying the creative-writing Ability in student teachers of English Methodology which constitutes the second objective, is writing a story, imagining and building an original theme or a plot around the details found in the poster presented to the subjects. The reasons for employing this tool in the identification of the Creative-Ability are as follows:

1. That poem and story writing not only do differ in their structural and organisational skill, but also in form and medium. One is verse another is prose;
2. that talent differs. One who is good in writing a poem may not be skilled in story-writing. For the avenues of inspiration are many. In addition, some will have an aptitude for poetry while, others show interest in stories. Therefore, poem-writing alone will not be comprehensive as it cannot take into account the Creative-writing ability in the prose-form.

3. Formwise also, story-writing is akin to some other forms like, fiction, drama and articles etc. So while poetry considers the rhyme, rhythm and the stanza form, story building requires skills of plot construction, a good beginning, a middle and a good ending; setting a scene, characterisation, rousing curiosity, creating suspense, capturing and sustaining the reader's interest or the gusto or the zeal to the end, the climax and the effective surprise etc.
4. Story-writing like the poem is easy for administration when compared to a novel or a drama because it is short and precise.
5. Another merit point is, that story is the most popular medium of reading material. The students are very much in the know of the mechanics of writing it through the mass media. It has been rousing the interest of the people so much at all the age levels - the old, the young and children - and at all places as a hobby and a pastime overcoming the boredom - in the train, in the plain and even in the kitchen. In view of this story-writing may be liked by the students. After all 'one should write for his age.'
6. Story as a form of Creative-imagination allows a free reign to imagination which is considered to be the main spring of all creative-writing. The B.Ed. students are youth, and hence have their own dreams, wishes, conflicts, strong impressions and better feelings, romantic ideas and ideals. The story gives them enough of scope to play upon with the above components and build the islands and utopias of their own.

Short story as expected from the student-teachers of English Methodology:

The researcher is not expecting such story form with all its perfection of form and structure as described above in point three, such as a good beginning, middle, ending etc., the main goal being creative expression rather than perfecting the form or the technical skills. The student is expected to imagine a theme and build an original story, not reproducing the story that is already known or existing. The story should be written naturally and spontaneously and it is not meant for audience, and the yardstick for such an expression is:

- a. Using the language that is their own,
- b. expression should reflect the personal drive or feeling, and,
- c. it should be different from the commonplace and unimaginative.

However, the researcher suggested some form or shape along with some creative elements indirectly, through her instructions which are as follows:

1. Imagine and build a story around the characters that you see in the picture.
2. Give names to your characters
3. Give a good beginning, a middle and a striking ending to your story.
4. Use a dialogue form wherever you can.
5. Provide as many nice titles as possible to your story.

Thus, some details about the story format, novelty of names, using a

dialogue technique, and fluency of ideas are suggested.

#### A Stimulating Aid-Picture:

Another poster carefully selected for the purpose of story-writing test was to be presented. The picture depicts the sun-set or the moon-rise or the glorious dawn depending on the subject's perception, its rays reflecting in the waters colouring red and two human figures facing the sun or moon as the case may be. And the caption beneath reads "God invented love and he would not mind if we borrow the idea." Which is intended like the other one for the poem, to serve as a basis and a clue for their imagination to take wings, as per the theme, plot construction and description and characterisation.

#### 3. Scoring Key of a Poem:

The above tool is only an inventory of the creative interests and the aptitude and the environmental factor. So the scores represent the creative-potential of the student-teachers and their school and home environment, while the composition of the poem and writing an imaginative story would test their creative-writing 'ability' in a living or practical situation. Therefore, the following criteria is drawn from the survey of English literature, Psychology and from research and the contemporary English professors and research experts. They are both cognitive, and affective, psychological and structural. The cognitive factors are those tested by the creative-research experts like Guilford, Torrance

Getzels and Jackson, Mednick etc. They are originality, fluency, flexibility and elaboration. They are called a creative syndrome together with curiosity, imagination and humour. Since heart is the seat of emotions and as literature is the expression of the poets deep passions, experiences, feelings and reactions the emotional factors such as sensitivity and mood are taken for criteria. The psychologists came out with some criteria which is related to the psychic functioning of the creative-writers. So factors like creative ego, playfulness, fantasy, psychological depth or insight are taken into consideration. And since literary critics value the structural and organisational elements such as the form, rhythm, rhyme, they are also included. A twenty-two point criteria for poem and a twenty-four-point criteria for a story was arrived at and the scripts of the student-teachers were scored by two lecturers including the researcher for establishing validity. The aggregate of the scores is taken for statistical treatment. The following table shows the criteria against which the poem and story scripts of the student-teachers were scored.

Table.3.15: Scoring criteria and Marks

S.NO.	POEM	MARKS	S.NO.	STORY	MARKS
1.	Sensitivity	2	1.	Sensitivity	2
2.	Originality	2	2.	Originality	2
3.	Fluency	2	3.	Fluency	2
4.	Flexibility	2	3.	Flexibility	2
5.	Elaboration	2	5.	Elaboration	2
6.	Title	2	6.	Mood	2

7. Rhythm	2	7. Setting	2
8. Rhyme	2	8. Humour	2
9. Imagery	2	9. Richness of Imagination	2
10. Figurative language	2	10. Plot-construction	2
11. Mood	2	11. Unusual title	2
12. Fantasy	2	12. A Good Beginning	2
13. Playfulness	2	13. Dialogues	2
14. Symbolism	2	14. Striking ending	2
15. Alliteration	2	15. Novelty of names and word-coinages	2
16. Assonance	2	16. Playfulness	2
17. Form	2	17. Fantasy	2
18. Style	2	18. Openness to experience	2
19. Tone	2	19. Effective surprise	2
20. Allegory	2	20. Symbolic expression	2
21. Language	2	21. Psychological insight or depth	2
22. Depth or Psychological insight	2	22. Title or caption	2
		23. Language	2
		24. Suspense	2

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DISCUSSION:-

The researcher arrived at the above criteria in view of their significance and value in a story-writing experience and process. In fact,

story-writing is akin to novel-writing and hence all the above characteristics hold good in a novel production too but for the length and other descriptions.

But one should not take it for granted, that all twenty two characteristics in poetry and the twenty four components mentioned under the story do contribute to the creative-writing ability. The first five components including curiosity and imagination constitute the creative syndrome, given out by the creative-researchers like Guilford. But the testing situation was different. Here, instead of testing the subject in individual components of creativity and predicting their likelihood of becoming writers, the researcher tested all the cognitive elements in a living, and practical situation of writing the poem and story to be more comprehensive.

Creative-writing is not purely a cognitive factor but connative too - not of intellect only but of heart and emotion too and hence the emotional factors related to creativity are to be tested - besides the above. Along with them the psychological factors which were thought to be contributing to creativity were added.

But just expression of the feelings, ideas and reactions won't do in creative-writing. the bone and sinew should be added in the form of some form or shape and structural elements and devices, especially, at the student-teacher level, they should figure important for, all the

components are contributory factors to the quality of a literary piece.

The student-scripts of the poem and story were scored by two lecturers against the said criteria and the average of these marks was considered for statistical analysis to gain objectivity. But all those who filled up the student-teacher Aptitude Questionnaire, could not write a story and all those who have written a story could not write a poem and therefore, the number of student-teacher aptitude Questionnaires is seven hundred and fifty two (752), while, the story and poem scripts are six hundred and eleven (611) and five hundred and eighty eight (588) respectively.

This is how the scoring of the student-teacher Questionnaire, the poem and story was carried on. In the following unit a brief description of the statistics used, their formulae and the method of calculating them will be presented.

5. The Bio-data Sheet of the student-teachers for the Degree English marks:

In order to study the fourth objective i.e. the correlation between the creative writing ability of the student Teachers and their English achievement, the researcher used their bio-data sheet as source.

The format of the bio-data includes (Appendix I ) the details of the student-teacher's name, class, college, State, Country etc. a column

is included for writing their marks obtained at the degree level (B.A., B.Sc., B.Com.) in both the student-teachers Questionnaire and the poem and story-writing sheet. Those marks were listed and used for computing the correlation.

6. The Biodata for sorting the Variables of sex, medium of instruction, economic status and parent's education:

In the above mentioned bio-data sheet of the student-teacher's Questionnaire, columns like sex, medium, parents monthly income and parents education were given.

Taking these details, the researcher sorted out the males and females among the student-teachers, the English and regional medium student-teachers, the high, the middle and the low economic groups of student-teachers and the post/professional education, the graduate, the under graduate, and the uneducated parent - background student-teacher group and found out the relationship of these variables with their creative-writing potential and ability scores of the present study.

Thus the instrumentation on the whole includes mainly the Development of four tools - 1. the Writer's Opinionnaire , 2. the Student-

teacher's Questionnaire, 3. Composing a poem, and 4. the writing an imaginative story, which measure the first and second objectives respectively. The Opinionnaire was meant for the creative-writers, while the Questionnaire, the poem and story for the student-teacher's sample. The fifth and sixth tools are meant for studying the correlation between the creative-writing ability and the English achievement, and creative-writing potential and ability with the four independent variables.

### 3.9,

Data collection:

Through the above instrumentation, the researcher intended to get six types of data - 1. the opinion bank of the creative-writers, 2. the creative potential scores of the student-teachers, 4. the same creative-writing ability - scores on the story, 5. the English academic marks at the degree examination, and 6. the variable particulars such as sex, medium, income and parent's education the following is the procedure of this data collection:

#### 1. The creative-writer's opinions:

When the writer's opinionnaire was ready, the researcher served them to a few contemporary creative-writers both in Baroda and in her native town. Later, she mailed a few to the writers suggested by the Sahitya academies. A few were given in person to the writers in the course of the student-teacher's data collection and some, were mailed abroad on securing their addresses from the 'who and Who' book of writers

in the American Embassy library in Madras. Thus altogether forty opinionnaires were selected for the purpose of the present study.

Some observations:

It was quite interesting to the researcher to approach some writers and hold a fruitful discussion about the Process of their Creative thinking and writing. The following are some observations on the whole:

1. Writers who were personally known to the researcher obliged to fill up the Writers' Opinionnaire:
2. Most of those writers reported that they were thrilled to recall thier experience of writing; the researcher could observe that note of elation and exaltation of feelings, when they were reflecting upon their experience.
3. Writers who haven't had adequate proficiency in English wrote and expressed in the regional language.
4. some of writers expressed that they simply write when they feel the urge and hence do not know about these research terms like - intuitive ego, creative-urge, sub-conscious mind, sensitivity etc.
5. Some writers didn't like to fill up the Opinionnaires for reasons best known to them.
6. One writer returned the 'Opinionnaire unfilled syaing that he was not

a creative-writer since he did not get any award. It seems he was angry with the government and the society for not giving the proposed award, and his family life seemed to be unhappy and hence he is living like a hermit shutting and shunning from society.

7. The return of the Writers' Opinionnaires from abroad is quite discouraging; may be for want of time, or postage or due to the no-bothering mentality of the writers.

On the whole, it was felt by the researcher that to get a large sample of writers would be rather difficult unless, there was some personal acquaintance with the writers.

Objective.2:

Tool.2:The Student Teachers' Questionnaire:

In order to study the second objective that is identification of the creative writing ability in student-teachers of English Methodology, the researcher selected and designed three types of tools; 3. The student Questionnaire to student the aptitude or the creative-writing potential 4. composing a poem 5. Writing an imaginative story, which measure the creative-writing ability in the actual performance of writing creatively in the above two forms.

A four point Likert scaling of scoring was adopted giving 3-2-1-0 for 'always, often, occasionally and never' respectively.

Administration of the tests: Objective 2: Time and Procedure

As stated earlier, the second objective of the study is to identify the creative-writing ability in student-teachers of English and a set of three tools - the student-teachers' Questionnaire, composing a poem and writing an imaginative story - were designed which were described in the above units. Now as per the question of their administration and time, the researcher as soon as she was ready with the final student Questionnaire, the poem and the story-writing sheet, wrote to various colleges of education and University Education Departments for permission to administer the tests of creativity stating the topic, time and help needed from the English Professor concerned. They were kind enough to accord permission for which the researcher is greatly indebted to them, and the periods or timings for administering the tests. The researcher opened up the session by giving a brief talk on Creativity in general and Creative-writing in particular and stressing the need and importance of creative education in the modern context. Very often the Principal, and some members of the staff who were interested in the topic of Creativity were present.

Then the two pictures - one for poem and the other for stimulating story-writing were displayed to the student-teachers. Then, each student was given the set of three tools - the Student Questionnaire, the poem as well as the story writing sheets. She informed that each task could possibly be done in half an hour. However the researcher was not

rigid about the time. Later, instructions for filling up of the student-Questionnaire, writing a poem and a story were read.

Then drawing their attention to the two pictures she read the captions saying that the picture and the caption are simply a clue or a basis or to motivate them in their tasks. But on that accord one need not cling or be rigid about the details of the picture; they could give free vent to their feelings, desires, ideas and can perceive the details of the picture in whatever way they like - making a tragedy or a comedy, a sun-set or a dawn, and whatever, they write would be confidential. The researcher saw that the students were undisturbed and were spread out and seated comfortably and after clarifying the doubts, and once they got into the mood, she ceased to interfere with them and allowed no consultations further.

Data collection from the student-teachers:

Later, when the final questionnaire, poem and story-writing sheets were ready, the researcher first administered the tests to the B.Ed., students of English Methodology in St. Joseph's College of Education for Women, Guntur. following the topic of teaching of literature for a week. The researcher very conveniently taught the topic since it is the college where she has been working and the topic is in the syllabus. she got printed some selective poems called 'The Inspiring Pen' by famous authors for conducting the sessions. They include some nature poems by Words-

worth, such as 'To the Cuckoo', 'Daffodils' and 'The Solitary Reaper'; 'A thing of Beauty' and 'Ode to Autumn' by Keats; 'Stopping by the woods on a Snowy Evening' by Robert Frost which is important from both the process of writing point of view and the message; 'The Tragical History of Dr. Faustus' by Christopher Marlowe and the 'Bangle Sellers' by Mrs. Sarojini Naidu which are known for their rhythm and music; 'The Garden' by Marvell which illustrates the sensitivity of taste by describing various fruits in the Garden; and a few verses from Shakespeare's dramas such as 'Antony and Cleopatra', 'Henry IV' and 'Hamlet' which illustrate the tragic element, and the truth of life and honour, and 'Fruit Gathering' by Rabindranath Tagore which has spiritual undercurrents of the universal and the individual souls. The Literary appreciation was taught for two periods and on the third day during the English period, she taught the mechanics of writing poetry. It was only then that she asked the student-teachers to write a poem looking at the picture provided. However the researcher was not rigid about the time.

Later in the next two sessions, she taught about story - writing mainly concentrating on the structure and organisation and conducted the test. There are about two hundred student teachers in English Methodology in the researcher's college distributed between two sections. She took only one section consisting of a hundred and eight students.

After, finishing data-collection in the researcher's College, she approached the Principal of a sister institution in the same town, The

Andhra Lutheran College of Education and took permission. But the researcher could not give these motivation talks there, as the concerned English Professor (Who has been guiding M.Ed., researches) also was competent to teach the topic of 'Teaching Literary Appreciation of the student-teacher". It was after that only the tools were administered to the student teachers in that college. There also she took only one section consisting of hundred students.

Meanwhile, she wrote to the Principals of various colleges in Madras and obtained their permission and scheduled timings and went round five colleges of education - The lady Willingdon, National Training College, Meston College, Stella Martitune College and the Government Teacher's Training College, drawing about two hundred of sample in the month of January 1984.

After, the Principals and the heads of the departments of the Bombay College of Education and the University Education Department were contacted and secured the data of two hundred from ten different colleges as the strength of English students was small in these colleges - They are the 1. S.T.College 2. B.T.C.College 3. Gokhale College 4. C.C.College 5. Hansraj Jivanandas College 6. St.Theresa Institute 7. St.Xavier's College 8. Sevasadan College 9. Gandhi Shikshayatan and 10. The Surabja Colllege.

Later, in the month of March '84 the researcher requested the

Principals and the heads of the colleges of Education in Calcutta and Delhi to provide for data collection in their colleges, but as the students were reported to be busy with practical examinations and theory after that, the researcher had to postpone her visits to those places to the next academic year. But when the colleges were opened for the academic year 1985-'86, the researcher had to allow a margin of two to three months, so that the students might get some orientation and acquaintance with the B.Ed. course because some of the items in the student teacher's questionnaire are based on the B.Ed., English content. Ultimately, in the month of August, she collected data from the following colleges of education in Calcutta: 1. Loretto College 2. Birla College 3. David Hare Training College 4. Shri Shikshayatan College 5. Department of Education and 6. T.T.College, Calcutta University. The data collected about one hundred and seventy eight.

Finally, the researcher had been to Delhi for the purpose of data collection as above, in September 1985, but to her great surprise she found only two colleges of education with a very small strength of fifteen in English Methodology in Zamia Millia Islamia and thirty six in Central Institute of Education. Hence, the sample collected was just forty.

Thus ending her 'yaga' of Data collection in the five cities - Guntur, Madras, Bombay, Calcutta and Delhi, and almost all colleges of education then existing in each city were covered except a few like St.Xaviers, Hastings and B.T.Girls College, Calcutta, both for want of permission and

time on the part of the researcher. After screening and sorting out the total sample, seven hundred and fifty two was chosen for statistical purpose of analysing their creative-writing potential, six hundred and thirteen, for the poem and five hundred and eighty eight for the story writing ability.

#### 3.2.5 Some observations:

The researcher, in the course of the data-collection, observed many interesting things. 1. In the first place, she feels she is quite enriched by the experience and refreshed by the visits to the four major cities of India. 2. She could develop an understanding or form a picture of the sort of student-teachers and their standards and their life modes in India on the whole. 3. More important is, she could know what is the English Language teaching scene like in India and felt that the student-teachers have a good ground in English. The following are some of the specific points of observation:

1. That most of the colleges of Education are Women's Colleges and women are attracted to the teaching profession than the men;
2. That most of the college-buildings are quite modern and spacious;
3. That in the four big cities the strength of the B.Eds. is very small, a 100 in each and the number of English Methods students is still less (15 to 30) except for one or two.
4. As per the topic of research - 'creative-writing', most of the heads

and the professors concerned showed interest and enthusiasm towards the topic and concept. They were quite welcoming, and most of them were present for the briefing session of the students on creativity, some discussed about the motive and tools adopted and have taken samples of them, especially, where there were M.Ed. departments.

5. The English or Psychology professors watched the administration of the tests.
6. In one or two colleges, a few students put up some resistance saying that the tests are meant for only some talented in writing. But later on with further explanation from the researcher finished the three tasks the questionnaire filling, composing a poem and writing a story.
7. Some wrote either a poem or a story saying that the time was not enough and conducive and also that they were not acquainted with that sort of writing exercises.
8. Some students expressed the thrill of their experience and novelty of writing.
9. Some students wanted the researcher to inform them of their results or the scores.
10. While some of the English professors exclaimed and expressed their wonder on reading the scripts of their average and problem students, who it seems, were not good in the academic performance.
11. Out of 752 selected sample, all filled up the Questionnaire, but only 613 and 588 could write a poem and story respectively.

On the whole, the researcher feels that the Data-Collection tour in the five cities brought about some awareness, interest and an outlook for the concept of creativity both in the students and the English professors. And the interest and zeal shown by many of them gave good impetus and confidence to the researcher although it was time-consuming and a great financial commitment on the part of the researcher.

Data - from Nigeria:

As per the Data-collection in Nigeria, the researcher had mailed about two hundred Student - Questionnaires along with the Poem and Story-writing sheets to one of her colleagues who was then working in Sokoto State as English professor. He was kind enough to administer the tests of creative-writing to the student teachers of English Methodology there and mailed them back. Being an English professor of merit and having been very well acquainted with the topic, he could carry on the procedure easily. About one hundred and seventy five were mailed back, but all of them could not do all the three tasks. All have filled the Questionnaire, but only fifty wrote the story and none attempted the poem. The above said professor mailed the data with a note that one cannot imagine the students there writing a poem, for, the standards are low. Therefore, only a sample of fifty was taken for statistical treatment and analysis which would be only an annex to the main study of the Indian sample although, the third objective necessitates it's study.

The Nigerian sample would facilitate the study of creative - writing

ability in another foreign language and cultural situation. Since English in Nigeria, just as in India, is being learnt as a second language by the students. Incidentally, the study also would reveal the position of the creative-writing ability in a different cultural connotation, for culture is their physical, and social environment in which the student-teacher is embedded like an insect in the amber.

Some observations: (as per the report of the English professor of the Nigerian students)

1. That the student-teachers of Nigeria are weak in English.
2. So all of them filled up the Questionnaire but only fifty student-teachers wrote a short story
3. and no one could attempt composing of a poem.

### 3.10. Validity and Reliability of the Student-teacher's Questionnaire:

The results of any study and the future - usability of a test depends upon the effectiveness of the instruments or tools used for the purpose. Therefore, validity and reliability are the two essential characteristics of a sound test.

#### Validity:

Freeman (1971) defines validity as an index which shows the degree to which a test measures what it purports to measure, when compared with the accepted criteria. The construction and the use of test imply that the instrument has been evaluated against the criteria regarded by experts as the best evidence of the traits to be measured by the test.

There are as many as six types of validity: 1. the operational and predictive validity, 2. the face validity, 3. the content validity, 4. Factorial validity, 5. Construct validity, and 6. concurrent validity which is employed in establishing the validity of the student-teacher's Questionnaire in the present study.

The Random House Dictionary defines the word concurrent as 1. occurring or existing at the same time or side by side; 2. having equal authority, or 3. something joint or contributory. So the modern meaning of concurrent validity is 'to indicate the process of validating the new test by correlating it, or otherwise comparing it for agreement, with some present source of information. The scores of one test are compared with the scores of another conducted in a short time gap, or sometimes it is compared with a standardised test like the Stanford Binet Scale. The validity of the present student-Questionnaire is computed taking the creative-writing potential scores, and the creative-writing ability scores of the poem and story together which were conducted with a short time-gap.

The student-teacher Questionnaire of the present study aims at establishing the existence or the presence of the creative-writing potential. Hence, the scores of the same are correlated with the creative writing ability scores of the poem and story which were valued against a twenty two and twenty four point criteria respectively. Therefore, it is called the criterion related concurrent validity.

The validity of the Student-teacher's Questionnaire: or the measures taken to testify to the item in it:

There was no standardised questionnaire 'to identify the creative-writing potential in the student-teachers'. The GIFFI-1 and GIFFI-2, developed by Rim (1975) and Davis (1980) provide some sample items which were designed to identify the gifted children in the American schools basing upon the creative-personality traits. The researcher eventhough followed that model she has to base the items on the B.Ed. English methodology content a bit to be more relevant and meaningful. Therefore, she has taken the following measures to establish the validity of the Questionnaire.

1. As mentioned above, the statements of the student-teachers' Questionnaire were based on the sample items given by Rim (1975) and Davis (1980) which were widely used. Therefore it has an empirical validity.
2. It is based on the components mentioned by the creativity researchers, philosophers, psychologists, literary critics and the writers themselves of the past and present (the forty contemporary creative writers sample of the first objective) reflecting the cognitive the affective, the psychological and the structural factors of creative-writing. Therefore, a construct validity was taken care of.

3. The statements are related by and large to the B.Ed. content with special reference to the English Methods which establishes the content validity.
4. A pre-test or a try-out done with the B.Ed. English students of Baroda and weeded out the difficult and the ambiguous items and words which indicates the face validity.
5. However, the researcher also computed the concurrent validity taking the scores of the total questionnaire for the whole sample and the scores of the poem and story together.

Correlation between the Creative writing potential, Environment and the Creative-writing ability:

$$C_x = \frac{fx^1}{fx}$$

$$C_x = \frac{-1055}{693}$$

$$C_x = -1.52236$$

$$C_x = -1.52$$

$$C_x^2 = 2.31750$$

$$x = \sqrt{\frac{fx^1^2}{fx} - C_x^2}$$

$$= \sqrt{\frac{37.35}{693} - 2.31758}$$

$$= \sqrt{3.0721}$$

$$x = 1.75276$$

$$C_y = \frac{fy^1}{fy}$$

$$C_y = \frac{450}{693}$$

$$C_y = 0.64935$$

$$C_y = 0.649$$

$$C_y^2 = 0.4217$$

$$y = \sqrt{\frac{fy^1^2}{fy} - C_y^2}$$

$$= \sqrt{\frac{3142}{693} - 0.4217}$$

$$= \sqrt{4.1127}$$

$$y = 2.0279$$

:250:

$$\begin{aligned} r &= \frac{\frac{\sum xy}{n} - C_y \times C_x}{\sqrt{\frac{\sum y^2}{n} \times \frac{\sum x^2}{n}}} \\ &= \frac{\frac{194}{693} + 1.52 \times 0.649}{2.0279 \times 1.75276} \\ &= \frac{0.27 + 0.9886}{2.0279 \times 1.75276} \\ &= \frac{1.26854}{2.0279 \times 1.75276} \\ &= \frac{1.26854}{3.55442} \end{aligned}$$

..  $r = 0.3569$ . (Low and Positive)

It is a low and positive correlation but significant according to Remmers and Gage (Fig.P.179) which shows that any value between .3 and .7 is significant.

Interpretation:

As said before the validity of the student- teachers' Questionnaire was computed by correlating the Total Scores of it with those of the poem and Story. But the student Questionnaire includes statements reflecting the creative environment also. So the scores of the attitude, aptitude and prior experience in creative-writing is called as the 'Creative Potential' or the innate capacity; The teacher's and the parents encouragement is termed as the 'Creative Environment'; and the scores on the

poem and Story together are called as the 'creative-writing ability. So the 'r' value of 0.36 establishes a triangular relationship between the Creative Potential, Environment and the Creative-writing ability. It implies that the innate capacity or the aptitude will be triggered up by the environment prevailing both at school and home and would result in the creative-writing ability or performance. In other words, the creative writing ability will be enhanced in a stimulating environment or by the encouragement of the teacher as well as the parent.

#### Reliability:

'Reliability in the language of statistics' says Anastasi (1977), is the consistency of scores obtained by the same persons when re-examined with the same test on different occasions or with different sorts of equivalent items, or under other variable examining conditions. So the word reliability means dependence or consistency of the scores at a particular time or at different occasions and it seemed to have been used in two different connotations: 1. the extent to which a test is internally consistent or accuracy of the results at a particular time, and 2. it yields consistent results on testing and retesting.

The reliability of the student-teachers' questionnaire of the present study was established in terms of the 'internal consistency' based on a single administration of it employing the Kuder Richardson formula named after its originators. It presumes that all items in the test

are physically homogenous and that every item measures the same factor or a combination of factors such as sensitivity, originality, fluency etc., the cognitive factors individually and in a cluster in the same proportion as every other item. (Free Man(1971) calls it as 'inter-item consistency' a characteristic of which is that, every item in the test has a high correlation with every other one.) The following is the formula

$$r_{11} = \frac{n \frac{2}{t} - M (n-M)}{\frac{2}{t} (n-1)}$$

and the following is the procedure how the correlation efficient is calculated.

#### THE RELIABILITY OF THE STUDENT-TEACHER QUESTIONNAIRE

The Reliability of the student-teacher questionnaire is computed taking into consideration the scores of the total questionnaire with all the areas-B,C,D,E<sub>1</sub> and E<sub>2</sub>. The mean and the standard deviation of the total sample 752 are calculated and using the Kuder Richardson Modified formula 1, the researcher computed  $r_{11}$ . A.M. of the total sample

is =203.037234

S.D. = 40.70180478.

$$\begin{aligned}
 \text{The Formula } r_{11} &= \frac{n \frac{\sum T^2}{t} - M(M)}{\frac{\sum T^2}{t} (n-1)} \\
 &= \frac{752(40.702)^2 - 203.037(752-203.037)}{(40.702)^2 (752-1)} \\
 &= \frac{1245802.909 - 111459.8006}{1244146.256} \\
 &= \frac{1134343.108}{1244146.256} \\
 &= 0.91174418
 \end{aligned}$$

From the  $r_{11}$  value it can be inferred that the questionnaire is highly reliable.

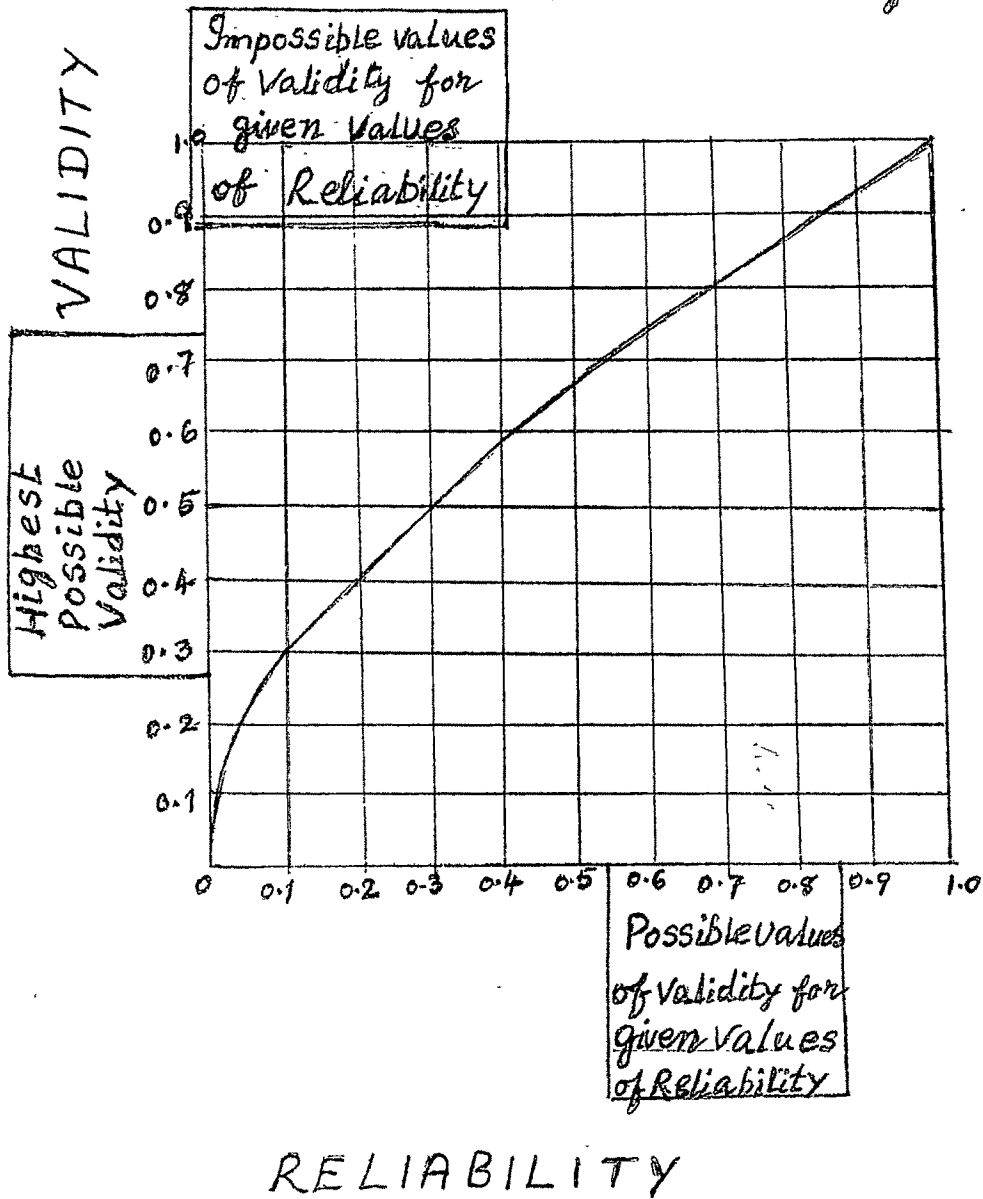
The criteria for judging and interpreting the significance-value of the result of validity and reliability.

Remmers and Gage '1942' (p 131) shows the maximum validities possible for various reliability coefficients when relevance is perfect.

Figure: Maximum validities possible for various reliability coefficients.

Graph 3.1: Maximum Validities possible for various Reliability Coefficients.

Remmers and Gage 1942 (p131)



The reliability value of the student-teacher questionnaire is .91, while the value of the validity of the same is found to be only .36 as shown before. It is quite evident that high correlation does not show a corresponding validity. The highly consistent scores need not be highly relevant or valid for the purpose although a high reliability is an index of the validity of the test or a questionnaire. Especially in a topic like creative-writing it can not be expected to be high. It only shows whether there exists a positive correlation between the variables and if so to what extent. .91 correlation is also an index that the items of the student-teacher questionnaire are consistent with one another and measure the same variables - cognitive, effective, psychological and structural. While, .36 validity signifies a positive, triangular relationship between the creative writing Aptitude, the school and Home Environment and the creative writing Ability as per the poem and story scores of the student-teachers in English. Educationally the result is of immense importance and value, for, it leads one to a conclusion that creative writing aptitude would result in a creative-writing ability provided it is nourished and encouraged at school as well as at home although to some extent. It is true that there should be a favourable attitude and aptitude for any creative-achievement. That urge for creative-expression is the first requisite and that should be triggered by proper environment and then only the creative impulse will be released and finds an actual expression in a product.

### 3.12 Procedure of the data analysis:

After scoring the data collected the data is analysed and inter-

preted using the appropriate procedure of measurement and the yardstick of measurement is decided by the nature and objectives of the study. Table 3. shows the details of the objectives of the study and the measure of Statistical analysis.

S.NO.	Objective	Statistical Analysis
1	To investigate into the Creative-writing Process	It is mostly a qualitative and descriptive study. Nevertheless, percentages of the Writer's opinions are computed wherever it is possible.
2a	To identify and classify the creative writing potential and ability of the student teachers of English methodology -India.	1. The mean of the total sample, area-means, state-wise, and College-wise means are calculated by Assumed mean or Short method by FX 100 2. The S.D.(Standard Deviation) of all the above kinds is also calculated. 3. The Coefficient of correlation by the Product Moment method is calculated to study the correlation between the creative-writing potential and the, Creative environment. 4. 't' values are calculated to study the level of significance of difference between two mean scores. 5. F.'3' Scores or Standard Scores or the 't' scores are calculated out of the raw scores of the poem.
2b.	To study the creative-writing potential and performance of the Nigerian student teachers.	1. The total mean, area-wise, State and College-wise means are obtained. 2. The S.D. (Standard Deviation) of the same categories is drawn from FX 100 Calculator.
3.	To study the correlation between the Creative writing ability and the English Achievement	1. the Coefficient of Correlation by the Product Moment method is calculated for each state student scores and Nigerian student-scores.
4.	To study the relationship between the creative-writing potential and ability and the	1. Means of the eleven groups. 2. Standard Deviations of the same groups, and 3. The Critical Ratio (C.R.) to know the level of significance between the paired means -1. the male and female, 2. the English and the regional

four variables of sex, medium of instruction, economic status and parent's education.	medium, 3. the Upper Middle Class, the Middle class, the Middle and Low economic class, the low and the Upper Middle class groups, and 4. the Un-educated and the under-graduate, the under-graduate and the graduate, the graduate and the post-graduate; and the post-graduate and the uneducated parentage student groups.
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Conclusion :

Thus the Current Chapter 3 reported the method of the investigation of the present study-its scope and limitations, the objectives, the sample and sampling, instrumentation, the data collecting and analysing procedures and the Reliability and the Validity of the Student - Teachers Questionnaire.

The ensuing chapter would deal with the actual analysis and interpretation of the data.

### 3.2 VALIDITY OF THE STUDENT - TEACHER'S QUESTIONNAIRE AGAINST AN EXTERNAL CRITERION.

The student - teacher's questionnaire of the present study is developed on the model of GIFFI-1 and GIFFI-2. (Group Inventory For Finding Interests) 1975 and 80 respectively by Rim and Davis. Taking the 24 sample items given by them, the researcher validated the Creative Aptitude section of the student - teachers' questionnaire.

The external criteria included the statements reflecting 1) the sense of humour 2) wide interests 3) Creative activity 4) attraction to complexity, etc. altogether 15 traits of creativity. The researcher's questionnaire consists of 13 different traits including Guilford's divergent thinking abilities, such as sensitivity, originality etc. The two questionnaires were served to a sample of 60 students.

The coefficient of correlation was computed using the scattergram by the formula P.135, Garrett; and its level of significance is asserted. The 'r' value is 0.3779. The degrees of difference is 58 and the value of significance is 0.325. Therefore, the student - teachers' questionnaire is considered to be valid.

The following details show the manner of calculation of the 'r'.

257-b

$$C_x = \frac{f_x^1}{N} = \frac{146}{60} = 2.433; \quad f_x^2 = 576$$

$$C_y = \frac{f_y^1}{N} = \frac{-28}{60} = 0.46667; \quad f_y^2 = 128$$

$$x = \sqrt{\frac{576}{60} - \frac{146^2}{60}} = 1.9182$$

$$y = \sqrt{\frac{128}{60} - \frac{(-28)^2}{60}} = 1.3839$$

$$\begin{aligned} r &= \frac{-8/60 + (146/60)(28/60)}{1.9182 \times 1.3839} \\ &= \frac{-8/60 + 4088/3600}{1.9182 \times 1.3839} = 0.3779 \end{aligned}$$

$$r = 0.3779$$

$$\begin{aligned} \text{Whereas } x &= \sqrt{\frac{f_x^2 - C_x^2}{N}} \\ y &= \sqrt{\frac{f_y^2 - C_y^2}{N}} \end{aligned}$$

r value is significant at 0.01 level.

Table 3.16 The Percentage Scores of the sixty student-teachers against each component of the student - teachers Questionnaire.

S.No.	Component	Items No.	Score	Percentage
1.	sensitivity	1-4	612	85**
2.	originality	5-9	666	74**
3.	fluency	10-12	286	73**
4.	playfulness	13-18	626	68
5.	flexibility	19-25	617	65
6.	elaboration	26-31	551	59
7.	metaphor	32-33	213	58
8.	humour	34-38,40,41	857	58
9.	magic	39	117	53
10.	rhythm	42-44	394	53
11.	rhyme	45-49	477	51
12.	imagination	50-52,53,	313	49*
13.	day-dreaming	51	47	26*
Total		53	** highly important	
			* least important	

This table presents the percentage Scores of the 60 student-teachers against each component reflected in the aptitude statements of the student-teachers' Questionnaire developed by the researcher.

The section consists of 53 statements testing 13 components of the creative aptitude. Since a four point scale (3-2-1-0) is used, the maximum mark that one item can obtain is (3x60) 180. A particular component could be reflected in one or more than two statements.

The following is the order of importance that emerged from the percentage Scores .

- |                       |                 |
|-----------------------|-----------------|
| 1.sensitivity         | 8.imagination   |
| 2.originality         | 9.fluency       |
| 3.rhythm              | 10.rhyme        |
| 4.humour              | 11.elaboration  |
| 5.magic and jugglery  | 12.flexibility  |
| 6.the use of Metaphor | 13.day dreaming |
| 7.playfulness         |                 |

It is obvious from the above details that 'sensitivity', 'originality', and 'rhythm', are found to be highly important while the components of 'day dreaming' and 'flexibility' are found to be least important as per the percentage scores of the 'creative writing aptitude' of the student - teachers.

Table 3.17. The percentage Scores of various components of creativity of GIFF by Rimand Davis 1980.

S.No.	Component	Items	Score	Percentage
1.	sense of humour	2	174	48
2.	wide interests	1	105	58
3.	creative activity	5	368	49
4.	attraction to complexity	1	91	51
5.	interest in new ideas&activities	2	223	62
6.	reflectiveness	2	285	79**
7.	energy and task commitment	2	198	55
8.	need for privacy	1	131	73**
9.	aesthetic&creative activities	1	55	31*
10.	artistic interests	1	91	51
11.	curiosity	2	237	66
12.	creative - self rating	1	118	66
13.	risk- taking	1	76	42*
14.	adventurousness	1	67	37*
15.	self - confidence	1	149	83**
** Highly important		Total	24	
* least important				

This table presents the percentage scores of the sixty student - teachers against each component of creativity on administration of the GIFF[1980 by Rimand Davis. The maximum mark that the total sample could obtain for each item is 180 and so the percentage scores are calculated.

The 15 components as per their percentage scores, take the following order of importance.

- |  |                                      |
|--|--------------------------------------|
| 1.self - confidence                    | 9.artistic interests                 |
| 2.reflectiveness                       | 10.attraction to complexity          |
| 3.need for privacy                     | 11.creative activity                 |
| 4.curiosity                            | 12.sense of humour                   |
| 5.creative - self-rating               | 13.risk - taking                     |
| 6.interest in new ideas and activities | 14.adventurous spirit                |
| 7.wide interests                       | 15.aesthetic and creative activities |
| 8.energy and task commitment           |                                      |