

#### EFFECTIVENESS OF BRAINWRITING AND CORT 5 THINKING CREATIVITY TECHNIQUES IN FOSTERING LIFE SKILL, ACQUISITION AMONG NIGERIAN UNDERGRADUATES IN OGUN STATE

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#### ABSTRACT

The study investigated the effectiveness of Brainwriting and Cort 5 Thinking Creativity Techniques in Fostering Life Skills Acquisition among Nigerian undergraduates. The study adopted was 3 by 2 pre-test, post-test factorial quasi experimental design. One hundred respondents (50, students from Tai Solarin University of Education (TASUED) and 50 from Olabisi Onabanjo University. (OOU) participated in the study. Frequency Count, t-test statistics and Analysis of Variance (ANOVA) was used to analyze the data collected from the study. Five(5) hypotheses were tested at 0.05 level of significance. Findings revealed that 46.5% of the respondents, make use of occupational skills as their Life Skills Assessment Scale 16 respondent, representing 16.2% make use of educational skill 6.1% prefer Home-based skill, 14.1% choose Social skills 2% of the respondent, prefer personal development skills and portable skill respectively while 7% prefer collaborative skills. Based on these findings, it was therefore recommended that teachers should employ different teaching methodologies in developing different skills in their learners. Secondly, the learners should be encouraged to exercise their mind on productive thinking through creativity thinking techniques like brain writing and cort 5 thinking strategy. It is concluded that brain writing and cort 5 thinking strategy are capable of boosting the thinking capability of the learner, this is done through persistent and persevering sense of achievement and attainment. It encourages students to think about what they might already know about a topic to be studied, and the follow- up discussion it helps to foster student's prior knowledge as well as engaging their interest in the subject to be studied.

Key words: Brainwriting, Cort 5 thinking strategies, Life Skills, Creativity, Undergraduates

#### INTRODUCTION

Life skill acquisition can be conceptualized as knowledge, experience and ability to put to use the knowledge for a specific benefit. Life skill acquisition is often explained in economic terms especially when an individual is skillful in carrying out a task to the purpose of money making. However, life skill acquisition can be explained experientially especially when an individual make use of residual knowledge to solve a problem and thereby get benefit. Life skills are important for youths and young adults in order to enable them think rationally and be productive in social relationship. According to world health organization (W.H.O), life skills are the ability of individual to adapt and develop positive behavior. Research have revealed that some undergraduates remain unemployed as a result of lack of creative behavior, Cort 5 thinking creativity are meant to help individuals (i.e undergraduates) in fostering life skill acquisition and develop creativity techniques in them which will make them a functional persons in life.

Creativity means escaping from existing perception and concepts to open up new ways of looking at and doing things. It has to do with reconceptualizing systems and ideas as well as creating new ones from scratch (Provost and Sproul, 1969). Furthermore, there is need for life skill acquisition, life skills are those competencies that assist people in functioning well in the environment in which they live. These skills are best learned through practice. Brainwriting is useful with a group of people who are somewhat reticent and would be unlikely to offer many ideas in an open group session such as Brainstorming. It is also useful when everyone has different problems that they want to solve. It also works well with large groups - there is no real limit to the group size. Creativity is treated as a normal part of thinking, involving processes that can be learned, practised and applied in a deliberate manner. Some of the processes are concerned with the escape from imprisoning ideas. Others are concerned with the provocation of new ideas Paulue (2000). "Problem definition" is an important part of creativity, as is the evaluation of "Suggested solutions" (Brown, 1998). Therefore, there are many types of creativity techniques, de Bono (2000) for instance identified fifteen creativity techniques, some of which include; six thinking hats technique, direct attention thinking tools, brainstorming

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# The Concept of Brainwriting Creativity Techniques

Conceptualizing brain writing however, will depend largely on understanding how brainstorming works and its limitation. Brainstorming is a creativity technique that allows for production of productive ideas in large quantity irrespective of their quality. Hence, many more ideas were generated in a brainstorming session, however, this is not without its limitation, one of which is that all the participants are not equally eloquent or even someone may be more quiet which may allow very few to dominate a brainstorming session. This is where brainwriting comes in. Brainwriting is an alternative method to brainstorming that tries to encourage a more uniform participation within a group. Like brainstorming, it is designed to generate lots and lots of ideas in a short amount of time. There are several methods for conducting a brainwriting session which are; 6-3-5 method, pool method, idea card (pin card) method and electronic method. It was originally developed by Professor Bernd Roharbach in 1968. Based on the concept of Brainstorming the aim of 6-3-5 is to generate new ideas in health within a short time. In a similar way to brainwriting it is not the quality of ideas that matters but the quantity. It is used to understand how different groups view an issue. You might try to conduct separate brain writing sessions with different literal groups. It can help you to get a better understanding of how different groups or departments view problem. Brain writing is a relative little-known technique that can vastly improve on the amount of ideas you get when running a brainstorming session. Compared to brainstorming, brainwriting has a number of advantages that should make it the preferred choice whenever one needs to come up with ideas to solve a team problem. It is quicker twice the number of ideas in the same time, and is preferred by more participants.

Brainstorming as a motivational technique with the intention to stimulate creativity in its collaborators. It can be applied in any stage of the project development; even so that it cannot solve all problems, as those that need immediate judgment or the ones that only possess two or three options. According to Bonfim (1984), the facilitator of brain writing (i) will supply instructions regarding the rules and principles of Brainstorming, in case the members are not familiar to the technique; (ii) after the formularization of the problem, the facilitator will initiate the session. It is the responsibility of the facilitator to organize the ideas, as well as the sequence where they will be displayed, they will be many, and at the same time. It is not allowed to bring already prepared lists; (iii) the secretary or the reporter must take notes of all the ideas in a clear and concise form or then to record them; (iv) when there is a reduction in the flow of ideas, the facilitator must get involved with his proper ideas in order to stimulate the creativity of the members of the group; (v) it can happen that the members of the group to get so involved with the ideas of the others, forgetting their own. The facilitator must ask them to write down there ideas and expose them when their turn arrive; (vi) when the facilitator perceives that the session is next to the end, he can stimulate the sprouting of the last ideas: g) is advisable to the approaching of the end of the meeting to read all the ideas, therefore many times some members may have new suggestions; (vii) the ideas must be typed in list manner, the facilitator can effect a revision classifying them in logical categories, selecting most promising, or, to request to the group of the Brainstorming session, that is the most common procedure. The importance of the process of ideas generation through the use of the technique of Brainstorming is evident as a management tool. Sudden changes are not believe, this is a slow work, where a few sessions will occur before some reasonable results are reached.

According to Reis (2007), noted that all the participants can have ideas can have ideas in simultaneous way and are stimulated develop more ideas generated by other participants. The main phases of this techniques are: (i) The facilitator clearly indicates to all the participants which is the problem that will have to be decided; (ii) The participants seated in a room and armed of paper and pens to write individually, during about five minutes, their ideas for the solution of the problem; (iii) Finished the time, each participant passes his sheet of paper to the



person seated to his side. He then will add to the paper his proper ideas, during five more minutes. This process can happen again diverse times, however, generally, three turns is enough; (iv) The facilitator of the session collects the papers and writes the ideas on a board or the use of posters, which could be displayed on the walls of the room; (v) Finally the participants discus the ideas and evaluate them, congregating the best ones and eliminating those that consider absurd or impracticable.

Brainwriting (also known as the 6-3-5 Method, or Method 635) is a group creativity technique used in marketing, advertising, design, writing and product development originally developed by Professor Bernd Rohrbach in 1968. Based on the concept of Brainstorming, the aim of 6-3-5 Brainwriting is to generate 108 new ideas in half an hour. In a similar way to brainstorming, it is not the quality of ideas that matters but the quantity (Collins, 1975). The technique involves 6 participants who sit in a group and are supervised by a moderator. Each participant thinks up 3 ideas every 5 minutes. The ideas are written down on a worksheet and passed on to the next participant. The participant reads the ideas and uses them as inspiration for more ideas. Participants are encouraged to draw on others' ideas for inspiration, thus stimulating the creative process. After 6 rounds in 30 minutes the group has thought up a total of 108 ideas (Leggett, 1996).

# **Organizing a Brain-Writing Process in 8 Steps:**

- 1. Write a goal/problem statement.
- 2. Prepare IGSs (Idea Generation Sheets) for all the participants. (Check Brainwriting at Mycotel, for a simple format)
- 3. Coop up all participants in a conference room, and seat them around a table.
- 4. Decide upon a time (say 5 minutes) in which every participant has to generate at least 3 ideas, and put them down on that sheet.
- 5. After 5 minutes, ask the participants push their sheets to a neighbor. Everyone pushes the sheets in one direction, either clockwise or anticlockwise.
- 6. Ask the participants to use the sheet that has arrived to add 3 more ideas. They may either base their ideas on their neighbor's ideas, or they can think of entirely new ideas.
- 7. Let the activity continue, until every participant has written on every sheet.
- 8. Collate, discuss, and select.

Generally this activity is carried out with 6 participants who add 3 ideas every 5 minutes and so it's also called the 635 technique!

#### Benefits of Brainwriting over Brainstorming:

- Doesn't make the introverted participants feel threatened/uncomfortable.
- Allows the participants some quiet time to think about ideas, so the quality of ideas is better.
- Reduces the chances of ideas being blocked, as nobody speaks, and so nobody listens
- Allows the moderator to work more efficiently and go home without popping 4 aspirins to ward off that headache, which usually results from moderating brainstorrning sessions (Mullen, 1991).

#### **Possible Disadvantages of Brainwriting:**

- Not all participants would try hard to come up with original ideas. As they don't have to speak up until the end, they won't be worried about their creativity being placed under the lens (Sutton, 1996).
- Not everyone is good at articulating his or her thoughts by writing. Such participants may be able to contribute more in the case of brainstorming (Paulus, 2000)
- The final output may be only "quantity" with no "quality" as the moderator had no opportunity to assist in the chain of thought-formation (Dugosh, 2000)



# Cort Thinking Programme Cort-1-breadth

CoRT thinking according to de Bono (2009), is a set of school materials usable for direct thinking as basic skill acquisition. According to him, cort thinking tools are necessary in the school setting because (i) they are practical (ii) they can be taught as a separate subject-thinking skills (iii) they can be used in a varieties of situations (iv) it appeals to a wide range of ages (6-adult) and abilities (IQs of 75-140).

Cort thinking programme teaches students of all abilities to effectively apply their intelligence to any academic, personal, or social situation. The lessons are dynamic yet basic enough to be taught at any grade level from K-Adult, with minor adaptations. These lessons help students broaden perception, as fundamental to thinking as vocabulary is to reading. Each of the lessons in Cort 1 is designed to encourage students to broaden their thinking Driscoll (1991). In the thinking of both children and adults, the dominant fault is often the tendency to take too narrow a view. An example of this would be to take up an instant judgment position on an issue without examining all the factors involved, before you reach, or make a decision (Brown, 1998). The lessons in Cort 1 define attention areas into which thinking can be directed: Looking for plus and minus points:

- Considering all factors
- Consequences
- Aims and objectives
- Assessing priorities
- Taking other people's views into account.

By making the deliberate effort during the lessons to direct their thinking towards these areas, students can develop the habit of broadening their thinking (Bennis, 1997). Research has shown that the use of these lessons can have a considerable effect in increasing the number of aspects of a situation that are considered (Collins, 1975).

#### **Cort-2-organisation**

The first five lessons in Cort 2 deal with five common thinking operations (Dennis, 1991). It begins by focusing on the subjects of deliberate attention, so that students can use them in an organised manner: asking specific questions and looking for specific answers (Mullen 1991). The next five lessons deal with the overall organisation of thinking so that it can be used in a deliberate and productive manner Sutton (1996). The intention is to treat thinking as an organised operation rather than a discursive ramble in which one thing leads to another (Paulusm, 2000).

Some of the lessons in the second half refer to processes learned in Cort 1 (BREADTH) lilt the lessons can still be used even if Cort 1 has not been taught, by omitting references to it (Leggett, 1996).

#### **Cort-3-interaction**

Cort 3 deals with two-people situations. The thinker is no longer looking directly at the subject matter but at someone else thinking. The main area is that of argument, debate, conflict, opinion, etc (Brown, 1998). These lessons provide ways of assessing evidence. It also examines different strategies used to prove a point and the two main classes of error (Sutton, 1996). There are two practical procedures for helping to solve conflicts; "Examine Both Sides (BBS)" and in the mapping operation called "Agreement, Disagreement, Irrelevance (ADI)." The aim of Cort 3 is to encourage pupils to listen to what is being said and to assess its value Bennis (1997).

#### **Cort-4-creativity**

It is too often assumed that creative ideas come only from inspiration and that there is nothing else that can be done about it. This is a mistake. We all have the potential to be creative. Cort 4 covers the basic creative techniques, procedures and attitudes Mullen (1991). Creativity is treated as a normal part of thinking, involving processes that can be learned, practised and applied in a deliberate manner. Some of the processes are concerned with the



escape from imprisoning ideas. Others are concerned with the provocation of new ideas Paulue (2000). "Problem definition" is an important part of creativity, as is the evaluation of "Suggested solutions" (Brown, 1998).

#### **Cort-5-information**

Cort 5 deals with information processes, such as questions, clues, guessing, belief, ready-made opinions and the misuses of information. It also deals with emotions and values and the part these play when dealing with information (Dugosh, 2000).

The aim of Cort 5 is to encourage a definite awareness of these influences - not to change them. The students are also trained to recognize what information they have, what they still require and how to use information. The techniques used in each lesson are designed to develop detachment and observation (Collins, 1997).

#### The Psychoanalytical theory of Creativity

**Major Tenets:** The main tenet of this theory is that people become creative as a reaction to difficult circumstances and/or repressed emotions (Paulus, 2002). It argues that people regress from their surroundings prior to creativity. As situations become difficult or they go through a traumatic event people pull back from their surroundings. They then rely on their creative side to find a solution to the difficult situation or as an outlet for their now repressed emotions (Sutton, 1996). As such feelings of inferiority also contribute to creativity. Those with feelings of inferiority are already in the regressed state and so use creativity as a way to feel superior and move forward. It theorizes that creativity wells from unconscious drives. Freud said "Unsatisfied wishes are the driving power behind fantasies". It further explains that creativity is how our preconscious and unconscious thoughts are able to materialise. Freud defines creativity as the ability to turn your fantasies into a reality through a form of art that defines creativity itself (Driscoll, 1991). The roots of creativity are mostly unconscious and combine with the conscious in the form of planning and production to produce a creative piece. Creativity also has a social aspect to it through the use of collaborators and naturally its audience. Freud also argued that creativity is a natural defense we develop to guard against neurosis. It leads to the development of sources of entertainment and pleasure for the public. For the artist though it gives us an outlet for our fantasies and feelings, enabling us to get them out instead of allowing them to fester inside. We are able to condense and displace our feelings (Brown, 1997).

Theorists of this school point to the countless case studies of psychological patients who have had parents that are controlling or critical and parents that stifle the patient's emotions, fantasies, spontaneity and childhood play. Patients who have had experiences that leave them with low self-esteem or feelings of rejection or abandonment often experience writers block, stage fright and a fear of failure. This in itself can lead to further depression they argue decreases our ability to be creative. Once these issues are addressed the patient then becomes able to express themselves creatively (Bennins 1997). The main opposition to this theory is that it fails to take into account that people are both biological as well as social beings (Mullen, 1991).

# Creative Theory of Psychoticism

#### Main Proponent of this theory: Eysenck.

The major tenet of this theory is that all creative people have a disposition for psychotic tendencies. It theorizes that these psychotic tendencies form the foundation for creative personalities. Creativity has been viewed by many to be linked to psychosis or madness since the times of ancient Greece (Paulus, 2000).

Psychoticism is seen as a half way area between a "normal" person and the state of psychosis. Although it can be linked strongly to sufferers of schizophrenia and bipolar psychoticism in itself is not insanity or mental illness in itself. While many people with diagnosed with schizophrenia would and do score high on the psychoticism scale this does not



mean that a schizophrenic is going to be more creative. It also does not mean that a psychotic could be diagnosed as being schizophrenic (Driscoll, 1991). As psychotics generally reject social, cultural or authoritarian norms they are generally the kind of people we associate with creativity. The open creativity of psychotics is about an anti-traditional, anti-convention form of rebellion (Mullen, 1991). Psychotic people see the world differently to those around them, see things we cannot and yet relate them to us in a way that we can identify with. They are also seen as having traits such as risk taking, liveliness, impulsiveness, sensation seeking, interpersonal hostility, aggressiveness, recklessness, disregard for common sense and spontaneity which are often associated with creativity. Psychotics tend to have a train of thought others would view as loose and unpredictable, traits we link with creativity (Brown 1998).

**Opposition to this Theory:** The main opposition to this theory is that Eysenck designed the test on which this theory is based specifically to support his theory which by itself would invalidate it. Many researchers opposed to this theory also argue that his theory was never really a theory at all. It has no clear definition. The entire theory is left open ended and open for discussion. However because it was left open for discussion it did lead to new theories in the field of creative theory (Dugosh, 2000).

# **Empirical Review**

With rapid changes in technology and global competition in all facets of human endeavour, it is crucial than ever that adolescents who are the hopes of tomorrow are fully equipped with lifelong skills that will make them relevant, and be able to subdue hindrances that may prevent them from translating their dreams to realities. When they are not well prepared for the challenges ahead most especially from the secondary school stage of education, the cost to individuals and the implication to the nation can better be imagined. The world of work has become dynamic to the extent that individuals require lifelong skills to survive, hi this ever-changing world, adolescent that relies on old methods for solving today's problems may have his dream for a better tomorrow shattered. The complexity of life challenges demands that we are forward looking in our approach to issues; as the solutions to yesterday's problems may be inadequate and misleading in tackling today's problems. Given the importance of education to individual and nation's development, it is not surprising that a sizeable literature has evolved early efforts focused on cognitive factors; but since these variables typically account for relatively small amounts of the variability in academic success (Ransdell, 2001). Researchers the world over, have become increasingly aware of the need to study a broader range of potential predictors of academic success. In today's information age, creative thinking skills are viewed as crucial for students to cope with a rapidly changing world. Many scholars now believed that specific knowledge would not be as important to tomorrow's workers and citizens as the ability to learn and make sense of new information (Gonen, 1993). If adolescents are to function effectively in this age of massive discontinuities and accelerating change, they must be equipped with lifelong learning and creative thinking skills necessary to acquire and process information (Mullen, 1991).

Unfortunately, while the importance of cognitive development has become widespread, critical thinking is not. Most students do not score well on tests that measure ability to recognise assumptions, evaluate arguments and appraise inference (Norton, 1971). Students' performance on measures of higher order thinking ability has displayed a critical need for students to develop the skills and attitudes of effective thinking (Robinson, 1980). Recent research findings (Amabile et al. 2003; Parker et al. 2004b) have indicated that cognitive intelligence, academic degree and other documentation of accomplishments do not ensure success in life. Rather, creative thinking competence skills are among the core keys identified as sources of viable ideas which form the building blocks for human success. Creativity skills are the engines that can drive sustainable human development. According to Akinboye (2003) "all the indexes of sustainable human development are not realisable if individuals, groups, corporate organisations ... lack creative thinking, cannot use new ideas, new concepts and



precepts to innovatively create ..." (p. 289). Any viable endeavour starts with creativity to generate ideas, which are transformed into success through appropriate action step. Creativity is the process of producing original and imaginative thoughts, ideas or concepts and putting them together in new and useful ways. Creativity propels organisation, catapult careers, and generate potent growth and viable outcome. The more creative a person is, the more self-reliant he becomes to enrich the quality of his own life, family, group and society at large. Teaching critical thinking skills therefore becomes the single most important thing that any country can do to enhance the development of her citizens. Consequently, the present study attempts to foster creative thinking ability of adolescents in secondary schools using provocation and emotional mastery training programmes Sutton (1996).

Provocation is a creativity technique developed by Edward de Bono. It is a technique that requires lateral thinking. It involves moving our thinking out of the established patterns that we use to solve problem normally. Provocation creativity technique is a challenge to exclusivity, which does not accept status quo and is particularly relevant in those areas where ideas have become obsolete with time. Provocation is more in the nature of hypothesis where a situation is first conceived or imagined and then one proceeds to arrive at unique plausible conclusions Leggett (1996). Although, a lot of research findings have confirmed that creativity skills are learnable skills and that some of the creativity techniques (Brainstorming, Brain-writing, Six Thinking Hats etc) can foster creative competence skills of both adolescents (Akinboye 1976; Animasahun and Akinboye 2002) and adults (Owodunni 2002; Amabile et al. 2003). However, there is dearth of research effort on the efficacy of provocation technique at fostering creativity skill of either adolescents or adults: hence the essence of the present study. Furthermore, there is growing recognition of the key role that emotions play in our lives. We are generally realising the limit of our minds and the need to balance intellect with feeling and emotion. The rapid change and the growing complexity of life challenges have made understanding and mastery of the emotions increasingly important (Collin, 1975).

Clergymen, educators, nurses and medical experts have begun to recognize the wisdom of broadening their narrow vision of rationality beyond simple rational calculation (exemplified by cost-benefit analysis) to reconsider the need for character development - including emotional engagement, perception, habits of thought, and skill acquisition—as essential to the development of expert clinical reasoning, judgment, and action. Practitioners of engineering, law, medicine, and nursing, like the clergy, have to develop a place to stand in their discipline's tradition of knowledge and science in order to recognize and evaluate salient evidence in the moment. Diagnostic confusion and disciplinary nihilism are both threats to the clinician's ability to act in particular situations. However, the practice and practitioners will not be self-improving and vital if they cannot engage in critical reflection on what is not of value, what is outmoded, and what does not work. As evidence evolves and expands, so too must clinical thought (Dieh, 1991).

#### **Statement of Problem**

Many Nigerian university graduates remain unemployed after the completion of their academic programme due to limited or lack of creativity and essential life skill that will assist them to be productive. Also, some of the major factors that limit the graduates after completion of their academic programme are as a result of lack of new ideas, inability to communicate or being ignorant, lack of problem solving skills, liability to think rationally self-knowledge skills or little self-management or our economic self-reliance, poor perception and cultural blockage

#### Purpose of the Study

The purpose of the study is to examine the effectiveness of Brain writing and Cort 5 Thinking Creativity Techniques in Fostering Life Skill Acquisition among Nigeria undergraduates in Ogun state in order to be productive and contribute positively to national development. Also to help in reducing the rate of unemployed graduates in Ogun state and the society at large and also teach various essential skills needed to link productivity and improve self knowledge



#### Significance of the Study

The significance of this study is to instill and teach the Nigerian undergraduates the various essential life skills that can help the individuals succeed and gain an overall better quality of life. This is because, life skill promotes self-confidence, awareness and understanding, tool to help to thrive and on rich personal growth. This skills include problem solving, communication, self knowledge and relationship, work and living, critical thinking, money and time management among others. Also the result of the findings will help individuals, Government, educational researchers etc. in their quest for knowledge to meet peoples' needs and make them self- dependent.

Life skills are often taught in the domain of parenting, either indirectly through the observation and experience of the child, or directly with the purpose of teaching a specific skill. Yet skills for dealing with pregnancy and parenting can be considered and taught as a set of life skills of themselves. Teaching these parenting life skills can also coincide with additional life skills development of the child. This study therefore becomes imperative. The study will also be useful for non-governmental organizations (NGOs) and organizations like the International Labor Organization and many life skills programs which are offered when traditional family structures and healthy relationships have broken down, whether due to parental lapses, divorce or due to issues with the children (such as substance abuse or other risky behavior).

#### **Research Hypotheses**

- **H0**<sub>1</sub>: There will be no significant difference between participants treated with brainwriting programme and Cort *5* thinking Programme
- **H0**<sub>2</sub>: There will be significant difference between the efficacy of brainwriting and that of Cort 5 thinking
- H0<sub>3</sub>: There will be no significant difference between the creative behaviour of female undergraduates and their male counterparts.
- **H0**<sub>4</sub>: There will be no significant difference between parent socio economic background of the treated and the control group.

#### METHODOLOGY

#### **Research Design**

The design for this study was 3 by 2 pre-test, post-test factorial quasi experimental design.

#### Population of the study

The study population is undergraduates in Ogun State

# Sampling and sampling techniques

Sampling is described as a particular means of drawing samples from a given population that is techniques and procedure adopted to provide bases for generalizing about a population through a sample taken from it. For the purpose of this study, the simple random sampling technique was adopted. The researcher limited himself to 100 respondents which comprises of some selected students from Olabisi Onabanjo University, Ago-Iwoye and Tai Solarin University of Education, Ijagun, Ogun State.

#### **The Participants**

100 respondents were randomly selected; a multi-stage random sampling technique was employed to determine the number of respondents for this study. There are three(3) public-owned universities in Ogun State, namely; Tai Solarin University of Education, Ijagun, Olabisi Onabanjo University, Ago-Iwoye, Federal University of Agriculture, Abeokuta. Two of these universities (TASUED and O.O.U) were randomly selected, and the participants cut



across the two selected institutions. The participants are drawn from 300 and 400 levels who are preparing for labour market after the National Youth Service Corps. The respondents consisted of 47 male and 53 female with respect to their age range between 15yrs and above with marital status of 70 single, 30 married and none is divorced. The relatively small sample size is necessary for the purpose of management in experimental studies and since this is not a survey study, there is room for manipulation of variables.

#### Instrumentation

The data for this study were gathered through administration of questionnaires. The questionnaires was divided into two (2) sections, A and B. Section A deals with the demographic characteristics of respondents such as Gender, Age and class, and Religion while section B deals with the psychological items relating to the life skills acquisition behaviour. Section B was weighed on a 4 likert scale labeled Strongly Agreed (SA), Agreed (A), Disagreed (D) Strongly Disagreed (SD). The test retest reliability coefficient of 0.86 confirmed the instrument to be reliable.

#### Procedure of Data Collection

This study being a 3 x 2 pre-test, post-test, quasi, experimental study in which there were three(3) groups namely; Experimental Group I, Experimental Group II and the Control Group. A treatment package of each creativity techniques: brain writing and cort 5 thinking were administered on the treated groups in sessions, while the control group was not exposed to any treatment. The pre-test scores were collected before the training was carried out while post-test scores were collected to determine the efficacy of the interventions vis-à-vis the control group, the sessions were run for a period of one week starting from introduction, orientation, practical sessions and evaluation. The scores were collected by research assistants under the supervision of research experts and analyzed appropriately.

# The Interventions

The Treatment session are briefly reported as follows:

- (a) **Experimental Group 1:** The treatment in this group consisted of students treated with Brainwriting Creativity Technique (BCT). First, the participants were arranged in group of 6, they are to generate 3 ideas within 5 minutes (6-3-5). They were exposed to the general principles of BCT on life skill acquisition: problem identification, generation of ideas, analysis, synthesis and value.
- (b) **Experimental Group II:** The treatment in this group consisted of general introduction and orientation, familiarization with components of cort 5 thinking tool: PMI(Plus-Minus-Interesting), CAF(Consider All Factors), Rules, C & S(Consequences & Sequel), AGO(Aims-Goals-Objectives), Planning, FIP(First Important Priorities), APC(Alternatives-Possibilities-Choices), Decisions, OPV(Other People's Views).
- (c) **Control Group:** This group consisted of the normal conventional method of teaching. Participants were not exposed to any treatment.

#### RESULTS

#### **Demographic Distribution of respondents**

Table 1: Gender

	Frequency	Percent	Valid Percent						
Male	47	47.0	47.0						
Female	53	53.0	53.0						
Total	100	100.0	100.0						

Table 1 above showed that male represents were 47.0% of the total sample while female respondents were 53.0% the implication of this is that there were more female student



than male confirming the prevalence of the female gender in the institution selected for the study.

	Frequency	Percent	Valid Percent
Valid 15 – 20	47	47.5	47.5
21 – 25	20	20	20
26 - 30	16	16.2	16.2
31 – 35	7	7.1	7.1
36yrs & above	4	4.0	4.0
Total	100	100.0	100.0

#### Table 2: Age Interval

Table 2 above showed the discrepancies in the age of respondents. Respondents within the age range of 15-20 years were 53.5% of the sample while those who fall within the age range of 21-25 years of age were 20% of the sample. Meanwhile, those within the age range of 26-30 years were 16.2 while those who fall within 31-35 years of age and those above 36 were 7.1% and 4.0% of the sample respectively.

Table 3:	Marital	Status	
	-		

	Frequency	Percent	Valid Percent
Valid Single	70	70.0	70.0
Married	30	30	30.0
Divorced	-	-	-
Total	100	100.0	100.0

Table 3 showed the marital status of respondents in the selected institution. Those who were single were 70% of the sample; married ones were 29.3% while there was no indication of those who are married and divorced. The implication of this is that our sample is constituted with respondent who are still single serving the majority.

<b>Table 4: Scores of Participants</b>	3' Life Skills	on the Scale of	Life Skills	Assessment Scale (	LSAS	)
					-	-

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid occupational skill "	46	46.5	46.5	46.5
Educational Skill	16	16.2	16.2	62.6
Home-Based Skill	6	6.1	6.1	68.7
Social Skill	14	14.1	14.1	82.8
Pastime Skill	6	6.1	6.1	88.9
Personal Development skill	2	2.0	2.0	90.9
Portable skill	2	2.0	2.0	92.9
Collaborative skill	7	7.1	7.1	100.0
Total	99	100.0	100.0	

Table 4 above displayed respondent responses towards item 20 on the questionnaire. It showed that 46.5% of the respondent make use of occupational skill as their LSAS, 16 respondent representing 16.2% make use of educational skill 6.1% prefer Home-based skill,



14.1% choose Social skill, 2% of the respondent prefer personal development skill and portable skill respectively while 7% prefer collaborative skill. This implies that most respondent believes more in occupational skills than other life skill acquisition skill.

# Hypothesis One

# H<sub>01</sub>: There will be no significant difference between participants treated with brainwriting programme and Cort 5 thinking Programme and the control group

 Table 5: ANOVA of difference between participants treated with Brainwriting programme and Cort 5 thinking programme and the control group

Source variation	Degree freedom	Sum square	of	Mean square	f. value	f-probability
Control Group	44	0.78237		0.19559	2.52	0.056
Treated	56	3.02308		0.07751		
Total	100	3.80545				

\* p < 0.05 I.

From the table above, the analysis of variance for 44 untreated and 56 treated participants showed significant differences with F-probability (0.056, P < 0.05) which is lesser than 0.05 level of significance.

# **Hypothesis Two**

Ho2: There will be no significant difference between the effectiveness of brainwriting and that of Cort 5 thinking

Table 6: T-test analysis of difference between Brainwriting and Cort 5 thinking effectiveness

Variables	N	Mean	SD	t-cal	t-tab	Р	Decision
Brainwriting	50	3.09	2.76	-0.45	0.01	0.04	Reject HO
Cort 5	50	2.11	2.41				

\*\* p < 0.05

The table above showed the t test for the hypothesis 2 which states that there will be significant difference between the efficacy of brainwriting and that of Cort 5. Since p value is less than 0.05 p < 0.05, this means that brainwriting and Cort 5 are both significantly effective.

# **Hypothesis Three**

H0<sub>3</sub>: There will be no significant difference between the creative behaviour of female undergraduates and their male counterparts



Variables	N	Mean	Std Dev.	t-cal	t-tab	Р	Decision
Creative behaviour of male undergraduates	47	2.22	3.01				
Creative behaviour of Female undergraduates	52	1.09	1.27	4.54	0.14	0.07	Reject н₀

Table 7: T-test analysis of difference between creative behaviour of male and female undergraduates

\*\*Not Significant at 0.05

The table above showed the t test for the hypothesis 3 which states that there will be no significant difference between the creative behaviour of female undergraduates and their male counterparts. Since p value is greater than 0.05 p > 0.05, this means that there is no difference between the creative behaviour of female undergraduates and their male counterparts.

#### **Hypothesis Four**

#### H0<sub>4</sub>: There will be no significant difference between the participants with high parental socio-economic background and their low socio-economic background counterparts

Table 8: T-test analysis of difference between participants' with high parental socio-economic background and their low socio-economic background counterparts

Variables	Ν	Mean	SD	t-cal	t-tab	Р	Decision
High Socio-economic Parental Background		77.5	22.5				
Low Socio-economic Parental Background	45	72.5	27.5	1.56	0.01	0.001	Reject H₀

The table above showed the t test for the hypothesis 4 which states that there will be no significant difference between the high participants' parental socio-economic background and low socio-economic background counterparts is rejected since p-value is less than 0.05 (p > 1000.05), this means that there is a significant difference between the socioeconomic status of the treated and control group.

#### DISCUSSION

The study revealed that male represents were 47.5% of the total sample while female respondents were 52.5% the implication of this is that there were more female student than male confirming the prevalence of the female gender in the institution selected for the study. It revealed the discrepancies in the age of respondents. Respondents within the age .range of 15-20 years were 53.5% of the sample while those who fall within the age range of 21-25 years of age were 19.2% of the sample. Meanwhile, those within the age range of 26-30 years were 16.2 while those who fall within 31-35 years of age and those above 36 were 7.1% and 4.0% of the sample respectively. It revealed the marital status of respondents in the selected institution. Those who were single were 70% of the sample; married ones were 29.3% while there was no indication of those who are married and divorced. The implication of this is that our sample is constituted with respondent who are still single serving the majority.

Hypothesis 1 that states that there will be no significant difference between participants treated with brainwriting programme and Cort 5 thinking programme and the control group was rejected. This is in line with submission of Roharbach (1968) who was of the opinion that idea generation can be fostered through creativity techniques including brainwriting and Cort 5 thinking programmes. Hypothesis 2 which states that there will be no significant difference AFRICAN JOURNAL FOR THE PSYCHOLOGICAL STUDY OF SOCIAL ISSUES pg. 95



between the effectiveness of brainwriting and that of Cort 5 thinking technique was rejected and this is in tandem with the submission of Owodunni (2002) and Amabile et al. (2003) who opined that creativity techniques (brainstorming, brainwriting, Cort 5 thinking programmes) are capable of fostering creative competence and skills of both adolescents and adults. This submission is in tandem with Robinson (1980) who is of the opinion that students' performance on measures of higher order thinking ability has displayed a critical need for students to develop the skills and attitude of effective thinking which can be done through creativity training sessions. Furthermore, Akinboye (2003), perceived creative behaviour as sustainable human development that is not realizable if the individuals lack creative thinking that can be easily taught with the aid of creativity thinking strategies.

Hypothesis 3 states that there will be no significant difference between the creative behaviour of female undergraduates and their male counterparts was rejected while the alternate hypothesis is accepted. This is in tandem with the submission of Akinboye (2003), who is of the opinion that all the indexes of sustainable human development are not realizable if all individuals, groups, corporate organizations... lack creative thinking and cannot use new ideas, new concepts and precepts to innovatively create. This suggests that creative behaviour and creativity thinking ability is not gender based and a universal trait that propels individuals to generate new ideas, to cause growth and viable outcomes. Mullin (1991) submitted that if adolescents are to function effectively irrespective of their gender in this age of massive discontinuities and accelerating age, they must be equipped with lifelong creative thinking skills necessary to acquire and process information. Sutton (1996) however recommended among others provocation, emotional mastery training programme and creativity thinking programmes regardless to gender differences to boost life skill abilities of the younger generation.

Hypothesis 4 states that there will be no significant difference between the high participants' parental socio-economic background and low socio-economic background counterparts was rejected and this is perhaps because the home environments of the rich and poor are different, as there will be provisions for stimulating environment and object in one and paucity of these in the order hence, adolescents from poor homes are hardly stimulated unlike the rich homes that can provide necessary and useful environments to stimulate the children and thereby increase the thinking capacities. This is in line with Edward de Bono (2004) who recommended provocation creativity technique that requires lateral thinking which suggest divergent thinking. Leggett (1996) corroborated this by saying that provocation enables individuals to balance intellect with feeling and emotion. Collins (1975) who in a study involves 6 participants who were of different socio-economic background was supervised by a moderator, performed creditably well in improved thinking capability as a result of creativity training sessions.

#### Conclusion

It is conclusive among other things that Brain writing is a relative little-known technique that can vastly improve on the amount of ideas you get when running a brainstorming session. Compared to brainstorming brainwriting have a number of advantages that should make it that preferred choice whenever you need to come up with ideas to slave a team problem. It is quicker twice the number of ideas in the same time, and is preferred by more participants. Also the Cort 5 Creativity Techniques aims to develop skill in broad practical thinking. There are people who can think brilliantly about everything except what they reality need to think about. It aims is to encourage individuals to feel them but in practical and sober way to develop a skill in practical thinking rather than in philosophical excursion get individual to look at thinking objectively instead of regarding it as based on ego and emotion.

# Recommendations

Based on the findings of this study, the researcher recommends the following for policy makers and stakeholders; to overcome the problem above, the teacher should consider a god teaching writing strategy. The teacher not only used one strategy, but also combines two



strategies in teaching writing, such as: combining Brain Writing and Quick Write Strategies in Recount Text. Brain Writing is giving students an opportunity to share what they know about a subject without taking the risk of being wrong. It encourages students to think about what hey might already know about a topic to be studied, and the follow- up discussion it help to foster student's prior knowledge as well as engaging their interest in the subject to be studied. Besides that, Quick Write is the process of writing itself to discover ideas on which they might further write and develop. This strategy helps the students to organize their ideas to develop their writing to be a god paragraph. The writer believes Brain Writing and Quick Write Strategies can increase students writing ability. By using this strategy, students will learn how to arrange and develop to their ideas and also can give motivation to the students that writing is easy to do.

Based on the conclusion above, the writer would like to give several suggestions to English teacher while teaching writing as the following: first, the teachers should prepare appropriate material and strategy that will be used in teaching writing in the classroom. Brain Writing and Quick Write could be used by English teacher in teaching writing for Recount text, it is a way to increase the students' understanding and ability in writing the text in Senior High School. Second, the teacher should be able to see how student's ability in writing and help the students to increase their ability in writing text so the students can get good achievement in teaching writing. The last, the teacher should consider the students is need in writing class to learn, because the teacher not only as educator but also as motivator and facilitator.

Writing is one of the most efficient ways to check individually understanding. By writing, the students can express their idea, thought, feeling, and their own experience through a written form. In writing, the students must really understand about grammar and structure because in written form the mistake will appear clearly.

It can cause misunderstanding for the reader if the writer writes without consideration about words choice, the grammatical of sentences, and using of the punctuation, hi addition, writer should make a good arrangement in writing to make the readers understand.



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