CREATIVITY AND CAREER MATURITY AMONG COLLEGE STUDENTS OF AIZAWL DISTRICT

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By

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DECLARATION

I K.Lalnunsiami, hereby declare that the subject matter of the dissertation entitled "Creativity and Career Maturity Among College Students of Aizawl District" is a record of work done by me; that the content of this dissertation did not form basis of the award of any previous degree to me, or to the best of my knowledge, to anybody else, and that the dissertation has not been submitted by me for any research degree in any other University/Institution.

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Certificate

This is to certify that the work incorporated in this Dissertation entitled **Creativity and Career Maturity Among College Students of Aizawl District** is a bonafied research work carried out by **K. Lalnunsiami** under my supervision for her M.Phil. Degree and the same have not been submitted previously for any degree.

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CONTENTS

List of tables

List of figures

CHAPTER I

INTRODUCTION

College students usually range from 18-22 age groups. They just pass their adolescence and are at the start of adulthood. These stages are equally important as other stages of development. This period emerges from childhood and merges into adulthood. During this period, the establishment of childhood goes away and a revolutionary process of change starts. In fact, it is a period of revolutionary change. It is markedly a period of growing up, during which the child develops into a man or woman. As the term is used today, it has a broader meaning than it had in earlier years. Instead of limiting the adolescence period to the time when the individual grows to maturity sexually, it is now extended until the individual is expected to be intellectually, emotionally and socially mature. It is that stage when one has to make an appropriate choice that fits the subject abilities, interest and occupational preferences. He must know what are his options and select based on his abilities and capabilities. Creativity and Career maturity is considered a primary concern.

Now let us understand what is Creativity? Creativity is the act of turning new and imaginative ideas into reality. It is characterized by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions. It is also called divergent thinking. Thinking is, by and large, an ideational activity. In other words, thinking is regarded as problem solving involving an ideational activity.

Since college students develop the ability of abstract thinking through systematic intellectual development, they tend to discover, create, produce new ideas and solutions to problems, inventions and work of art, view and interact with the world in their own way, become more expressive, rearrange the existing idea that proves to be their unique personal experience. Hence, in this way, they manifest their creativity.

Every society is endeavoring to work out the creative talents of its member to meet the educational needs of all students. Manpower needs have to be carefully assessed before such a system is devised and implemented. Human talent is our greatest national resource. Its development and conservation should be, therefore, a primary concern for everyone. When human talent is wasted, everyone is deprived, when it is rightly developed, everyone benefits. But it is only few exceptionally talented individuals who contribute most to the growth of society. They create new horizons and set new standards in science, technology, literature, fine arts, business, industry and social leadership. No sooner does society become devoid of nature's gift of talents than it would start to stagnate and ultimately perish.

The educational environment in any society should place a high value upon the creative thinking potential of its school children. This has been necessitated by the stepped-up cultural changes in the world characterized by population explosion and explosion of knowledge which is becoming specialized day by day due to technological advancements and specific innovations. It is not merely the coming of the space age and its technology which has produced the upsurge of interest in creativity but rather the social implications of these advances. It relates the serious deficiencies in culture to its dearth of creativity and maintains that there is an urgent need for the development of creative behaviour among individuals. It can be said that the outstanding creative ability of fairly small percentage of the population is mankind's ultimate capital asset.

Modern education is based on the worth of an individual. Creativity, as an instrument of change, can act as a means to a civilized society for improving the lots of its members. The educational institutions are responsible for shaping the creativity according to the needs of the individual by creating a suitable environment so that he might achieve to the best of his abilities and become a contributing member of the society. One way of becoming a productive member of the society for an individual is maturity. The major avenue for maturity is through one's work which can be fulfilled by selecting a suitable occupation. Selection of a right type of job and subsequent growth and adjustment in it is satisfying both to the individual and also meets the manpower needs of the society.

The role of occupation in the life of an individual has much broader psychological importance than has generally been recognized. Young men and women leaving the educational institutions and entering the world of work are faced with various problems about their career. Those leaving educational and training institutions are already under the impact of numerous variables in matters of choice-educational, vocational, social and personal. These variables appear to play an important role in the educational choices of the students which in turn become instrumental in their career choices.

Career maturity is conceptualized as an individual's readiness to make well informed, age appropriate career decisions and to shape one's career carefully in the face of existing societal opportunities and constraints. Selection of a career and setting in it is an important task and a source of personal gratification. In the modern age of science and technology, hundreds of vocations have been thrown open to an individual. An adolescent is the period when a major turning takes place in the life of a student because the career will depend upon the subject selected at this level. Many a time, a student is forced to choose a career that is against his/her wishes viz.

Age and maturity can bring a new level of passion, ability and insight for creative expression. Although some areas that depend on physical performance, or accumulating and processing vast amounts of information, may become less easy or available as we age, many creative endeavors flourish with increasingly varied life experience and the kind of vitality adult development can nurture.

Being creative throughout our mature second halves of life can be nurtured by staying open and curious, seeking ways to reconnect with interests we may have had as children, but abandoned in favor of the mundane necessities of making a living and modulating our needs to be perfect. Not that it is always easy, but new interests can be developed and pursued at almost any age. Just because we haven't done something creative before, does not mean when we are older we can't do it, and find great pleasure in the doing.

1.1 NEED OF THE STUDY

One of the beautiful gifts to human being is the ability to think. He can think, discriminate between various objects, categorize them into different elements of his environment and take decisions. Moreover, he can discover or create new things to meet various necessities of life. In a nutshell, human being is inherited with remarkable creative potential. Though human being is endowed with the lots of innate creative potential yet it develops with his level of maturity to acquire its perfect shape.

Being creative isn't just for artists, authors, and musicians. All of us can, and should, think about our careers creatively – working with the raw materials at hand to make something unique. In the context of career development, these raw materials might include education and training accomplishments, past working experiences, interests and hobbies, volunteer service, as well as skills and abilities.

An increasing rate of changes, uncertainties, challenges and problems characterizes today's world. It is an epoch of complexity, disorder, ambiguity. The internet and the new media have shortened time and distance. The labour market is increasingly competitive, demanding employees who can successfully meet the workplace challenges, innovate, act quickly and present effective solutions to unexpected problems. In this scenario, creativity is of utmost importance, a survival skill that needs to be nurtured in different contexts. Scholars from various fields highlight the need of a great attention to the development of the creative capacity across the various levels of education, especially in higher education. The benefits of creativity to individuals and societies, as well as the key role of higher education for the development of a knowledge society have been recognized. Governments of several countries, such as China and England, have taken initiatives aiming at the implementation of educational policies that ensure the development of creativity through education, Paradoxically, despite the recognition of the importance of developing students' creative abilities, not only in early education but also in higher education, as a condition to prepare students to succeed in an uncertain future, there is agreement that creativity has not received the necessary attention in university courses.

At present, the future prospect of every country rest on the educational system and vocational set up of it. The advancing countries have to look forward in their educational and vocational plans to adopt suitable practices to cope with the present and future needs of the individuals, social groups and nations. The stereotype systems in educational and professional spheres deliver little goods and hamper extensively.

The present world is growing in complexity in almost every direction. Fruitful decisions on educational and vocational issues need valid and reliable findings of intensively carried- out researches on related matters.

Creativity with career maturity has been found to be influenced differently in different culture. The reason for the differences varies on our value system. Creativity is no doubt an innate potential, yet it is also influenced by many factors such as home environment, society and value system. Similarly, maturity of a person is influenced by the surrounding environment and value system. In many cases, the vocations of a student are chosen by their parents without knowing the child's ability, interest and potentials. It is important to know the creative ability of the child in order to develop his creativity for future preferences.

Selection of career and setting in it is an important task and a source of personal gratification. In the modern age of science and technology, hundreds of vocations have been thrown open to an individual. The choice of a right career is becoming difficult in these days. Adolescent is the period when a major turning takes place in the life of a student because the career will depend upon the subjects selected at this level. After the 10th class school curriculum has been diversified into Art, Science and commerce. In adolescents age career maturity is very important. Therefore, it was considered relevant to study this aspect namely career maturity among college students.

Till today, researches have been done on creativity and career maturity/vocational maturity. The researches so far conducted studied the different aspects and correlates of creativity and career maturity in different age groups. No such studies have yet been conducted under Indian condition. The investigator felt the need to conduct research on the creativity in relation to career maturity of college students of Aizawl district to find out whether creative students are vocationally matured in choice of career. Keeping in all this in mind, the following research questions were raised:

- What is the level of creativity and career maturity among college students of Aizawl District?

- Is there a significant difference in level of creativity and career maturity with reference to gender?
- Is there a significant difference in level of creativity and career maturity with reference to streams of study?
- Is there a significant relationship between creativity and career maturity among college students of Aizawl District?

1.2 STATEMENT OF THE PROBLEM

The present study is proposed to find out whether students who have creative talents are vocationally matured in their choice of career. Ultimately, the present study is stated as "Creativity and Career Maturity Among College Students of Aizawl district".

1.3 Operational Definition of Keywords

Creativity is the ability or capacity of an individual to create, discover, or produce a new idea or object, including the rearrangement or reshaping of what is already known to him which proves to be a unique personal experience.

Career maturity is the term which denotes the place reached on the continuum of career development from early exploratory years to decline. It is the extent to which an individual is able to master certain career developmental tasks that are applicable to his/her life stage.

1.4 OBJECTIVES

1. To find out the level of creativity among college students of Aizawl District.

2. To find out the career maturity level among college students of Aizawl District.

3. To compare the level of creativity with reference to their gender.

4. To compare the career maturity level with reference to their gender.

5. To compare the level of creativity among college students with reference to their streams of study.

6. To compare the career maturity level among college students with reference to their streams of study.

7. To study the relationship between creativity and career maturity level of college students in Aizawl District.

1.5 HYPOTHESES

Based upon the above objectives the following hypotheses were formulated for the investigation.

1. There is no significant difference between male and female college students of Aizawl District in their creativity.

2. There is no significant difference between male and female among college students of Aizawl District in career maturity.

3. There is no significant difference in creativity among college students of Aizawl District with reference to streams of study.

4. There is no significant difference in career maturity among college students of Aizawl District with reference to streams of study.

5. There is no relationship between creativity and career maturity among college students of Aizawl District.

1.6 DELIMITATION OF THE STUDY

The study is delimited only to the Arts, Science and Commerce students of six (6) Degree Colleges of Aizawl District.

CHAPTER-II

REVIEW OF RELATED LITERATURE

INTRODUCTION

Literature review is a text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. It is composed of discussions of facts and principles to which the present study is related.

The present chapter deals with the review of related literature on Creativity and Career Maturity which are broadly classified into two category.

2.1 Reviews Related to Creativity

John Bowers (1969) conducted a study entitled "The Interactive Effects of Creativity and IQ on Ninth-Grade Achievement" with special focus upon the IQ threshold concept of Torrance. He hypothesized that achievement is predicted better by IQ than by creativity below the IQ threshold, while IQ validity decreases as creativity validity increases above the threshold. This implies an IQ X Creativity interactive effect on achievement. If an IQ threshold exists, regression weights for IQ X Creativity interactive predictors should be statistically significant when included in multiple regression equations. Three creativity factor scores were estimated and were each multiplied by IQ to define three moderated or interactive predictor variables. A slight though statistically significant increase in validity resulted by adding the moderated variables to IQ and the three factor scores in multiple regression equations. Thus, there was weak support for the existence of an IQ threshold, but the regression of achievement on creativity decreased rather than increased with higher IQ.

Jeffrey Maitland (1976) emphasized that no simple characterization of creativity seemed possible. Once we understand the difference between creative performance and problem solving and that creativity in the arts is creative performance, we can under- stand how short of the mark the traditional formulations of the problem of creativity are. Most views conceive of creativity in terms of what the artist can know prior to completing the work of art, and in one way or another see creativity as a form of problem solving. In creative problem solving, foreknowledge is indeed a logical impossibility.

Joseph R. LaChapelle (1983) studied "Creativity research: Its sociological and educational limitation" where he argued that creativity, its enhancement, and the understanding of the creativity of others are integral parts of art education, problems still exist in understanding the creative process. Given a legacy of creativity research, it is possible to recognize certain problems in the conceptualization of creativity research as that research relates to the visual arts. Concepts of creativity and of culture have changed in a way that necessitates closer attention to the sociological aspects of creativity. Problems emanate from the general disregard of the modernization process in our culture, as that process relates to creativity, and from the impact of the contemporary fine arts on creativity research and art education practice.

Erik L. Wetsby& V.L. Dawson (1995) conducted a study on "Teachers' Perception of Creative Students". Study 1 was based on earlier works that identified personality characteristics associated with creativity. The prototypically of these characteristics as they applied to creative children was rated by college students. Elementary teachers were then asked to rate their favourite and least favourite students based on these characteristics. There was a significant difference between the teachers' judgment of their favourite and least favourite students on this measures. Judgement for favourite students were negatively

correlated with creativity, judgment for least favourite students were positively correlated with creativity. Students displaying creative characteristics appear to be unappealing to teachers.

Christina E. Shalley (1995) conducted a study entitled "Effects of Coaction, Expected Evaluation, and Goal Setting on Creativity and Productivity". Study 1 indicated that high levels of creativity occurred when individuals worked alone, and productivity was high when they worked alone under no expectation of evaluation. Study 2 found the highest creativity occurred when individuals had a creativity goal and worked alone under expected evaluation. Productivity was low when people worked alone or were assigned a creativity goal. Implications of these results for models of creativity and managing creativity at work are discussed.

Robert J. Sternberg and Wendy M. Williams (1996) conducted a study entitled "Basic learning techniques, teaching creative tips, and technique to increase creativity". This study also argued that once we have a major creative idea, it's easy to spend the rest of our career following up on it. It's frightening to contemplate that the next idea may not be as good as the last one, or that success may disappear with the next idea. The result is that we can become complacent and stop being creative.

Irene-Anna N. Diakidoy and ElpidaKanari (1999) studied "Student Teachers' Beliefs about Creativity", creative outcomes, and factors related to creativity. Even though the importance of facilitating creativity in educational settings has been recognized, little attention has been paid to teachers' beliefs about creativity. In this study, a questionnaire, designed to explore conceptualizations of creativity and issues related to it, was administered to 49 student teachers. The results indicated that student teachers tend to perceive creativity as a general ability primarily manifested in the context of artistic endeavors. Moreover,

creative outcomes were thought to be novel but not necessarily appropriate or correct. These findings were discussed with respect to their educational implications.

National Advisory Committee on Creative and Cultural Education (1999) established in February 1998 by the Secretary of State for Education and Employment, UK. The task of the committee was t*o make recommendations to the Secretaries of State on the creative and cultural development of young people through formal and informal education: to take stock of current provision and to make proposals for principles, policies and practice.* The proposals were intended to show that creativity *can* be developed and how this might be done. In this study members of the committee offered their definition of creativity and the implications they see for promoting the creative development of young people. This committee defined creativity as first, they always involve thinking or behaving *imaginatively*. Second, overall this imaginative activity is *purposeful*: that is, it is directed to achieving an objective. Third, these processes must generate something *original*. Fourth, the outcome must be of *value* in relation to the objective. We therefore define creativity as: Imaginative activity fashioned so as to produce outcomes that are both original and of value.

EleniSefertzi (2000) reported that creativity involves the generation of new ideas or the recombination of known elements into something new, providing valuable solutions to a problem. It also involves motivation and emotion. Creativity "is a fundamental feature of human intelligence in general. It is grounded in everyday capacities such as the association of ideas, reminding, perception, analogical thinking, searching a structured problem-space, and reflecting self-criticism. It involves not only a cognitive dimension (the generation of new ideas) but also motivation and emotion, and is closely linked to cultural context and personality factors." (Boden 1998). Further, the author also stated that Creativity is not an innate quality of only a few selected people. Creativity is present in everyone. It can be

learned, practiced and developed by the use of proven techniques which, enhancing and stimulating the creative abilities, ideas and creative results, help people to move out of their normal problem-solving mode, to enable them to consider a wide range of alternatives and to improve productivity and quality of work. “Creativity is thus constructed as a learned ability that enables us to define new relationships between concepts or events, which seemed apparently unconnected before, and which results in a new entity of knowledge” (European Commission 1998). Knowledge and information are the basis for creativity.

Thomas Priest (2001) studied “Students' assessments of Musical Creativity in relation to their ability to function creatively as composers”. Compositions collected from 54 non-music majors enrolled in music fundamentals classes were used as a measure of compositional creativity. Independent judges reached acceptable levels of agreement in assessing musical creativity and other dimensions allowing students to be placed into high-, middle-, and low-creativity groups. Additionally, students completed Creativity and Craftsmanship Assessments (CCA) by listening to sets of 5 exemplary compositions produced by students previously enrolled in the course. Students' verbal descriptions of creativity and craftsmanship from the CCA were categorized. A chi-square analysis of the students' descriptions yielded statistically significant differences between high-, middle-, and low- creativity groups. Students in the high-creativity group were more likely to cite temporal factors as contributing to creativity and craftsmanship than were students in the middle- or low-creativity groups; students in the low- and middle-creativity groups were more likely to use metaphors than were students in the high-creativity group.

Anna Craft (2003) studied “The limits to creativity in education: dilemmas for the educator” on some possible social, environmental, cultural and ethical limits to creativity, in the context of educating for creativity (NACCCE, 1999). It argues that the notion of

creativity may be value- and culture-specific and that this poses the so-called liberal educator with various dilemmas of principle and pedagogy, which are explored. As far as education is concerned, this growth in emphasis and placed on encouraging creativity can be seen as being in stark contrast with the government policy prevalent from the late 1980s onward. One of the underpinning themes and justifications for this re-kindling interest in fostering creativity is that the individual and collective empowerment which is fostered by the development of creative skill to be a good thing at the social and economic level in particular. These justifications have been discussed elsewhere.

Maria-Rosario Jackson, Florence Kabwasa-Green, Daniel Swenson, Joaquin Herranz, Jr. &Kadija Ferryman., et.al. (2003) conducted a study entitled "Investing in Creativity: A Study of the Support Structure for U.S". Artists designed to stimulate and sustain interest that could lead to action on issues regarding the artist and creativity at both national and local levels. This was achieved through the periodic dissemination of preliminary findings to funders of the study and other possible stakeholders. These study presents a comprehensive framework for analysing, monitoring, and improving the support structure for artists in the United States. The concept includes the conventional grants and awards typically associated with support, but it encompasses much more because it recognizes the importance of the wider environment in which an artist works. The framework includes six interrelated dimensions, which are Validation, Demand/markets, Material supports, Training and professional development, Communities and networks and Information.

Mark A. Runco (2004) explained that Creativity has clear benefits for individuals and society as a whole. Not surprisingly, a great deal of research has focused on creativity, especially in the past 20 years. This chapter reviews the creativity research, first looking to the relevant traits, capacities, influences, and products, and then within disciplinary

perspectives on creativity (e.g., biological, cognitive, developmental, organizational). Great headway is being made in creativity research, but more dialogue between perspectives is suggested. New and important areas of research are highlighted, and the various costs and benefits of creativity were discussed.

Karlyn Adams (2006) studied "The sources of Innovation and Creativity" and presented a comprehensive summary of current research and theory on the source of innovation and creativity, both in individuals and organizations. Based on the recurring concepts in the existing literature, the paper concludes with some recommendations for how education systems can best foster these attributes in students. Both research and recommendation have been conducted with a view to informing US workforce development efforts within the context of the new global economy. This paper mainly deals with issues regarding what do we know about the sources of creativity and innovation in individual? What do we know about curricula and pedagogical techniques that have proven effective in promoting innovation and creativity through formal and informal education?

The impact of Culture on Creativity (2009) was a report submitted to European Commission. The report illustrates the impact of culture in the development of new products and services, (including public services), driving technological innovation, stimulating research, optimizing human resources, branding and communicating values, inspiring people to learn and building communities. Culture-based creativity is an essential feature of a post-industrial economy. A firm needs more than an efficient manufacturing process, cost-control and a good technological base to remain competitive. It also requires a strong brand, motivated staff and a management that respects creativity and understands its process. It also needs the development of products and services that meet citizens' expectations or that create these expectations. Culture-based creativity can be very helpful in this respect. This culture-

based creativity is linked to the ability of people, notably artists, to think imaginatively or metaphorically, to challenge the conventional, and to call on the symbolic and affective to communicate. Culture-based creativity has the capacity to break conventions, the usual way of thinking, to allow the development of a new vision, an idea or a product. The nature of culture-based creativity is closely linked to the nature of artistic contribution as expressed in art or cultural productions. The spontaneous, intuitive, singular and human nature of cultural creation enriches society.

Beth A. Hennessey & Teresa M. Amabile (2010) has conducted a "Psychological study of Creativity". The authors argued that if strides are to be made in the sciences, humanities, and arts, we must arrive at a far more detailed understanding of the creative process, its antecedents, and its inhibitors. This review, encompassing most subspecialties in the study of creativity and focusing on twenty-first-century literature, reveals both a growing interest in creativity among psychologists and a growing fragmentation in the field. To be sure, research into the psychology of creativity has grown theoretically and methodologically sophisticated, and researchers have made important contributions from an ever-expanding variety of disciplines. But this expansion has not come without a price. Investigators in one subfield often seem unaware of advances in another. Deeper understanding requires more interdisciplinary research, based on a systems view of creativity that recognizes a variety of interrelated forces operating at multiple levels.

Francesca Gino & Dan Ariely (2011) studied "The Dark Side of Creativity: Original Thinkers can be more Dishonest" where the authors test whether creativity increases dishonesty. The authors also proposed that a creative personality and creativity primes promote individuals' motivation to think outside the box and that this increased motivation leads to unethical behaviour. In four studies, they showed that participants with creative

personalities who scored high on a test measuring divergent thinking tended to cheat more (Study 1); that dispositional creativity is a better predictor of unethical behaviour than intelligence

(Study 2); and that participants who were primed to think creatively were more likely to behave dishonestly because of their creativity motivation (Study 3) and greater ability to justify their dishonest behaviour (Study 4). Finally, a field study constructively replicates these effects and demonstrates that individuals who work in more creative positions are also more morally flexible (Study 5). The results provide evidence for an association between creativity and dishonesty, thus highlighting a dark side of creativity.

Preparing 21st Century Students for a Global Society (2011) studied three Cs, such as, "Critical Thinking and Problem solving, Communication, Collaboration, and Creativity & Innovation". These study argued that Creativity is closely intertwined with some of the other skills – Three Cs. Innovation today has a social component and requires adaptability, leadership, teamwork, and interpersonal skills. Increasingly, today the capacity to innovate is linked to the ability to connect with others and with a facility for communication and collaboration. These study also forged alliances with key national organizations that represent the core academic subjects, including social studies, English, science, geography, world languages, mathematics, and the arts. These collaborations resulted in the 21st Century Skills Maps that illustrate the intersection between core subjects and 21st Century Skills. This section includes examples of what creativity and innovation skills might look like in core academic content classrooms.

Jane Piirto (2011) conducted a study on "Creativity and Innovation Skills within a Comprehensive Skills Framework". It also discuss the five core attitudes creative people seem to possess: (1) Core attitude of Self-discipline about doing the creative work, which

includes the presence of motivation; (2) core attitude of Naiveté, or openness to experience; (3) core attitude of Risk-taking; (4) core attitude of Tolerance for Ambiguity; (5) core attitude of Group Trust.

MihalyCsikszentmihalyi (2012) on her study "Creativity in Today's Children" observed that the most creative people share a common experience in childhood: that of being left alone, often in a barren environment, and of being bored. Paradoxically, solitude and boredom become the springboard from which a creative passion is born. Finally, the author questions whether the presence of technology in children's lives today is an opportunity for learning or a source of effortless experiences that are not conducive to nurturing creativity.

M. Cathrene Connery & Vera John-Steiner (2012) studied "Educational Programs that Foster the Creative Ingenuity". This study presents a cultural-historical approach to creative education (CHACE) to cultivate K-5 students' higher order thinking, critical inquiries, and imaginative proficiencies. The text illustrates the application of Vygotskian theory in elementary, bilingual classrooms where interdisciplinary, collaborative, and apprentice initiatives in the arts, humanities, and sciences facilitate the acquisition of literacy, numeracy, and content knowledge. Relationship, affect, and cognitive pluralism are discussed as theoretical cornerstones in a system of activities to nurture children's novel interpretations, enhanced understandings, imaginative problem solving, critical innovations, and artistic creations within a supportive teaching-learning community.

Ralph A. Córdova Jr., KristiinaKumpulainen& Jeff Hudson (2012) studied events within a Cultural Landscapes Collaboratory (CoLab) *"3RDSpace: Summer Leadership Institute on Creativity & Innovation"*. The analyses are organized into two telling cases and reveal how participants develop a shared understanding of *Responsive Design*, Co Lab's theory of inquiry and innovation. Drawing on an interactional ethnographic perspective, the

analyses make visible the ways in which concepts of space, language, creativity, and innovation complement one another to form *Responsive Design* as a powerful approach for educators in any setting to transform their ordinary places into extraordinary spaces for creatively confident learning.

John M. Davis, VinnarasanAruldoss, Lynn McNair & Nikolaos Bizas (2012) employs data from a European Union (EU) funded project to outline the "Different contexts and factors that enable Creativity and Innovation". It suggested that creativity and innovation are supported by flexible work settings, adaptable learning environments, collaborative design processes, determined effort, and liberating innovative relationships. It concludes that learning environments that seek to enable creativity and innovation should encourage collaborative working, offer flexibility for both learners and educators, enable learner-led innovative processes, and recognize that creativity occurs in curriculum areas beyond the creative arts.

Margaret Louise Dobson (2012) claimed that "Questions, not method, are the heart of research" (Hendry, 2010, p. 73). Prompted by untutored intuition in the form of questions generated from two stories about teaching and educational leadership, this investigation looks for insights, not answers, to the mystery of identity and creativity. Putting two and two together reveals an intangible "in-between" (Arendt, 1974); distinguishes thinking and knowing (Arendt, 1971); elucidates intuition and intellect (Bergson, 1998/1907); exposes emotion and feelings as vital aspects of reason (Damasio, 1994; 1999); and conspires to revitalize the meaning and purpose of education.

Marcea Ingersoll (2012) conducted a study on "How student's creativity can be engaged or neglected". While the narrative highlights the potential conflict between students' lives and their schools, the hope lies in the illuminative power of stories of difficulty. By

interweaving narrative and theory, the author sheds light on the conditions that inhibit creativity, and emphasizes the capacity of teachers to locate creative, compassionate spaces for themselves and their students.

Divya Jindal-Snape (2012) conducted a study on "Creative Approaches to Facilitate Educational Transitions". It presented examples from research and practice which suggest that creative activities can be used in multiple ways to portray children and young people's voices. Author argued that these voices, as well as the process of being heard, can help modify existing transition practices, identify new transition practices, and enhance children and young people's ability to manage change. Theories of self-esteem, resilience, and emotional intelligence have been used to explain the psycho-social processes that a child, or young person, goes through during transitions, as well as how creative approaches can be used to support these processes.

Seu'ula Johansson-Fua, DonasianoRuru, KabiniSanga, Keith Walker & Edwin Ralph (2012) facilitated three inter-professional mentorship workshops in Fiji and Tonga, which were part of a series of such events that they recently conducted across the Pacific region. These workshops, in turn, formed part of a larger, ongoing leadership initiative co-sponsored by several local, regional, and international organizations. The purpose of each workshop was to facilitate each multi-disciplinary cohort of leaders in attendance to begin to create an adaptable mentorship model that would fit their unique Pacific contexts. One task within these model-development sessions was for each cohort to create metaphors that they believed best encapsulated the essence of their specific mentorship approach. In this article, the authors summarize aspects of that creative process, present several metaphors that the three cohorts generated, and raise implications regarding future mentoring initiatives.

Carol Lipszyc (2012) studied how a "Student model creative non-fiction essay" develops students in a third-year creative writing workshop as critical readers, editors, and writers. Over the course of two semesters, student writers reciprocally acquire strategic knowledge and enhance their creativity. Plural voices emerge in the dialogue between the model student/writer, her peers, and my curriculum as evidenced in the narrative excerpts composed and revised by the student; in her peers' critical feedback; and in students' reflections. Exploring this collaboration, the author envision affording more opportunity for student model writers to share their evolving knowledge in both traditional and online classrooms.

Patricia Martínez-Álvarez, María Paula Ghiso& Isabel Martínez (2012) studied how "Multimodal literacy experiences grounded in bilingual learners' sociocultural realities stimulated creativity and allowed students to demonstrate and practice their creative abilities". In order to explore bilingual students' creativity in the literacy classroom, we grounded our work in the following guiding questions: Will an instructional sequence involving expansive literacy activities grounded in learners' sociocultural realities and mediated by technology result in first grade bilingual students' enhanced creative performance in writing samples? What are the distinguishing characteristics of creative written products bilingual students generate when invited to share their home and community experiences orally and visually? The contexts for the study are two public elementary schools in a large Northeastern city. A total of 93 first graders participated in this study. Fifty-four children participated in the instructional sequence (27 and 27 in each of the two classes respectively). Fifty-three of these children identified as Latino, and all received free lunch. Due to absences, only 48 were included in the quantitative analysis we feature in this article. The majority of the children's families, and many of the children themselves, were immigrants from Latin America. The dual language program functioned on alternating days

according to language. The Spanish teacher was bilingual; the English teacher did not speak Spanish, but showed a resource orientation to the children's native languages and an appreciation and understanding for Latino culture. Both planned collaboratively and were highly regarded at the school. This study show of support is a testament to the possibility of creating school opportunities for learning that take seriously the value of family, and underscores the creative resources in the community that directly or indirectly inform the children's academic work. The interviews with students regarding this project show that they possess a mature understanding, not always shared by teachers, of the importance of integrating family stories and community experiences into their schoolwork.

Michele Pinard, Gina Marie Bilardi, Donna Cappel& Kathy Irwin (2012) shares one junior faculty member's account of how she and her students debated, deliberated about, decided to, and ultimately reshaped a traditional, foundational Principles of Education course in an undergraduate teacher education program. Three former childhood, art, and theater education students highlight their experiences, observing connections between their own and their instructor's creativity and evolving philosophies of education. Together, they illustrate issues they confronted while reflecting individually and collectively on how and whether to creatively teach and learn, while also being constrained by practical, systemic realities.

Lisa Russell & Nick Owen (2012) reports on an arts-informed approach to education research aimed to critically develop and promote teachers' creative practice and understanding of creativity for both pupils and teachers. The creative research process is described to reveal how it developed 20 students as researchers in a secondary school in England. The students' perspectives impressed artists and enlightened expert researchers into new ways of thinking and doing research. A reciprocal relationship was developed that unraveled novel data and promoted pupil voice.

Sumer Seiki (2012) conducted a study to cultivate "Empathetic understanding in undergraduate pre-service teachers". The study inquiry into the process of creating, writing, and performing a sound story about my family's American Japanese imprisonment experience to better understand this teaching method and adapt it for teacher education. The inquiry reveals counter stories of agency and resistance, as well as a powerful and creative teaching tool for increasing empathy in both the teacher and students.

Jenice L. View, Mary Stone Hanley, StaciaStribling, Elizabeth DeMulder (2012) studied "How arts nurture creative process" through the experience of a group of P-12 classroom teachers who explored the use of the arts to nurture their own creative processes, classroom research, understanding of difference, particularly race and culture, and instructional practices in the context of a graduate teacher professional development program. There was typically no expectation of creativity in the context of teacher professional development programs. Yet, the Common Core Curriculum and other constructs demand that teachers exhibit considerable creativity in curriculum and instruction. The challenge then for teacher educators were to support each learner's individual growth toward greater cognitive complexity.

Jan S. Watson (2012) studied"A reviewof undergraduate students' perceptions of working in a creative learning environment" .It was suggested that there is a need for lecturers to discuss and share creative pedagogical strategies designed to support student learning in different settings. This review, which draws on a study of undergraduate students' perceptions of working in a creative learning environment, is underpinned by the idea that everyone has the potential to be creative. Empirical data was obtained from semi-structured interviews with students in Year 3 BA in Education Studies, their reflective sketchbooks, and notes from observations undertaken in the campus-based Visual Arts Centre studio. The

findings supported the view that students benefit from having access to creative opportunities which involve self-examination and risk-taking in a supportive, collaborative space.

Akbar Fadaee&HaithamObaidAbdAlzahrh (2014) studied the key factors of "Creativity and Innovation as Development of Communities" together. In this paper, first the concept of innovation was introduced, then the difference between creativity and innovation comes, at the end the relationship between creativity, innovation and entrepreneurship is depicted. Authors also argued that our age is acceleration age, transformation and change. This wave of change affects all our lives by planned or unplanned. Hence, a society is leading tin global competition that has skilled and creative experts. Currently, one of the contributing factors to transform the face of economic, social and industrial of a country is an entrepreneurial activity. Hence, in the new field, a society is leading in a competitive community that its graduates should be able to collect the creativity and dynamism of resources and effort to pay creative business and be entrepreneurs.

Hasan Bakhshi, Carl Benedikt Frey & Michael Osborne (2015) conducted a study "Potential quantitative impact of the expanding scope of automation on creative employment" that represent what is in fact humankind's longstanding obsession with expanding its engineering capabilities to allow machines to perform tasks that have previously been confined to workers. While many barriers to automation have recently been overcome, allowing sophisticated algorithms and autonomous vehicles to substitute for workers in wider range of domains, creativity arguably still provides a big obstacle to automation. This study examined the potential quantitative impact of the expanding scope of automation on creative employment, and related implications for the demand for skills and the future of inequality. The algorithm uses the trends and patterns it has learned from bulk data to correct for what are likely to be mistaken labels. The non–parametric approach also

allows for complex, non–linear, interactions between O*NET variables: for example, perhaps one variable is not of importance unless the value of another variable is sufficiently large. Finally, the probabilistic approach returns not just the most likely label for an occupation, but also quantifies the uncertainty in this classification given the available data. As such, our approach is robust to mislabelling and provides transparent assessment of the confidence in and justification for its classification. The result of this study estimated that as many as 24 percent of jobs in the United Kingdom, and 21percent in the United States, have a high probability of being creative, including a wide range of occupations in Education, Management, Computers, Engineering and Science in addition to Arts and Media. We also report that creative skills receive higher wages in the labour market: with the important exception of some Arts and Media jobs, creative professions on average earn relatively high wages.

Deanne and Gary Gute (2015) studied “How Creativity Works in the Brain”. This study claims that Creative insight depends in part on new combinations of existing ideas, concepts, and perceptions that have been stored in the brain over time. However, the study further examine that memory supplies the brain with sensations and information about experiences of all kinds, along with facts, skills, and emotions we can recognize and recall long after the initial input. Creativity, however, requires more than simple recall. It requires divergent thinking, the ability to associate and combine ingredients, a capacity for which an infinite number of potentially unique recipes may exist.

Christopher Martiniano (2016) conducted a study on “The Scientization of Creativity”. He argued that the need for a handbook of creativity presupposes that the aptitude and skill for producing a genius innovation, its "rules" or methods can be learned and imitated. At their root, both verbs "to innovate" and "to create" call for making something

novel and original; but in the Creative Economy of the twenty-first century, they both call instead for solving a problem or redefining the task presented by a problem in the marketplace. Solving a problem innovatively and appropriately by rules and methods, I contend, differs greatly from creating something original and exemplary. Corporatized creativity discourse values the former while humanists' understanding of creativity recognizes the latter. Further the author also stated that if it is assumed, as current creativity discourse does, that anyone can learn to be creative and produce innovations, then the teaching of creativity is both necessary and problematic.

2.2 Reviews Related to Career Maturity

Gribbons and Lohnes (1968) studied "Readiness for Vocational Planning" (RVP). In 1958 they began the Career Development Study, using their RVP scales as the instrument for assessing vocational development. The study involved 111 interview subjects in the eighth and tenth grades. The subjects were interviewed again in the twelfth grade and once again two years after graduation from high school. The basic design of their study was to determine the predictive validity of the RVP scales against eight dimensions of readiness: factors in curriculum and occupational choice, verbalized strengths and weaknesses, accuracy of self-appraisal, evidence of self-rating, interests, values and independence of choice. They concluded from the evidence brought out in the study that readiness for vocational planning may be well-defined and reliably estimated as early as the eighth grade.

John O. Crites (1973) studied "The prevailing view of vocational choice among counsellors, educators, and laymen". These study suggested that the obvious into face between career maturity and career education should be explicated and emphasized. The career behaviours which have been found to mature during late childhood, adolescence, and early adulthood are the very ones which are the prowled out-comes of career education (Marland, 1972). Theory and research on career maturity, as reviewed and summarized in this paper, can contribute the concepts and measures needed by career education to conceive and evaluate curricula and training programs; and, conversely, career education can expose young people to the experiences they need to enhance and facilitate their career maturity. Together, career maturity and career education represent a synthesis of principles and procedures which should benefit the individual and society alike.

W. Bruce Walsh (1973) conducted a study entitled **"**Career preferences, Self-Concept, and Vocational Maturity" and explored the differences in self-concept and

vocational maturity variables between freshmen students who made congruent, incongruent, and undecided college major choices. The self-concept variables were operationally defined by the Tennessee Self Concept Scale. The vocational maturity variables were defined by the Career Questionnaire, Form IV, and the Vocational Development Inventory. Congruent, in-congruent, and undecided college major choice groups were defined operationally using the Vocational Preference Inventory. The analysis of variance revealed the main effect of groups (congruent, incongruent, and undecided) to be significant for four vocational maturity variables. The test for the main effect of sex was found to be significant for one vocational maturity variable. The test for interaction was found to be significant for one self-concept variable. The findings tentatively suggest that subjects in the congruent male and female groups tend to be more vocationally stable and mature than subjects in the undecided male and female groups. Limitations in the results of the present study were pointed out.

David K. Clapsaddle (1973) conducted a study entitled **"**Career Development and Teacher In-service Preparation" and hypothesized that there would be no significant difference between the vocational development of a group of sixth-grade school children who received instruction from teachers who participated in CETIP and a similar group of children whose teachers did not participate in CETIP. Two groups of sixth-grade children, enrolled in two predominately black schools in a Kansas City, were involved in this study. The instrument used for this study was the Vocational Development Inventory: Attitude Scale (VDI). This instrument is composed of self-descriptive statements concerning an individual's vocational attitudes and behaviors.

Robert B. Cormany (1975) studied "Classroom Technique: A Careers Unit for the Junior High EMR Student". He supervised a special education program for 150 EMR students in a south central Pennsylvania school district for two years. The results of the

Career Maturity Inventory indicate that the program did add a degree of realism to the students' attitudes toward careers, which were very low at the beginning. The Picture Interest Inventory showed that the pat tern of student interests remained fairly constant. Apparently the volume of information the students were exposed to did not cause any substantial or erratic fluctuations in interests.

Rodolfo Arredondo (1976) conducted a study entitled **"**The Effect of Vocational Counseling on Career Maturity of female cooperative Health Education Students". He investigated the effects of different counseling treatments on the career maturity attitudes of high school health career students. In addition, the study was designed to measure the effects of different counseling treatments on career maturity competencies. This investigation was conducted during classroom time between the months of October and January in the academic year of 1975-76. The subjects in the experimental treatment groups were informed by their teachers that a counselor would administer some vocational tests and would later discuss the test results with each group, as well as on an individual basis, The subjects were then administered the Attitude Scale of the Career Maturity Inventory and the Educational Occupational-Individual Preference Scale as pretest measures during the first week of October. The results of this study indicate that vocational counseling (teaching the test method) and the Self-Directed Search (SDS) experience are effective techniques in facilitating certain dimensions of career development. Therefore, this study supports Super's (1957) and Crites' (1961, 1973) theoretical positions that the maturational process can be facilitated.

Penny Robinson Woodcock and Al Herman (1978) studied "Fostering Career Awareness in Tenth – Grade Girls" a short term career development programme, designed especially for tenth-grade girls, working in small groups could affect significant improvement in the level of career awareness exhibit by the participants. The programme was not designed

to teach the girls about specific careers or the route to these careers. Its aim was, instead, to improve the girls. A sample of 45 subjects was selected from two tenth-grade physical education classes in a Calgary, Alberta high school. The physical education classes were used because they are segregated according to sex and because this is a subject all girls in the school must take. The girls had been randomly assigned to the physical education classes. The results suggest that the development program did effect significant improvement in overall career awareness.

Allen A. Mori (1980) studied "CareerEducation for the Learning Disabled: Where Are We Now" and traces some of the current trends in career education for the learning disabled and presents a model for providing career education to secondary learning disabled students. The findings indicated that Career education leads to the development of appropriate self-awareness regarding one's interests and abilities, the development of positive personal, social, and work attitudes, and the development of entry - level skills in a selected area of specialization.

Carol Ann Moore (1982) studied "Self-appraisal and Vocational Maturity; An Examination of the model of Career Maturity posited by J. 0. Crites" and examined the different model of career maturity. Subjects for the study were recruited from Hunter-Huss High School in the Gaston County Public School District, Gastonia, North Carolina. A variety of instruments were chosen for use in this investigation. Standardized instruments employed included the Career .Maturity Inventory, consisting of both the Attitude Scale and the Competence Test, and the Self-Directed Search assessment booklet. Three additional instruments were constructed by the author for use in this investigation. The "Vocational Readiness and Personality Rating Scale" was developed for completion by the subject's parent or guardian. The "Vocational Personality Self-Appraisal Scale" was developed for completion by each subject prior to administration of the standardized inventories. The

Personal Data Sheet was developed and provided for students to complete at the initial information session. Results obtained from the varied statistical procedures applied in the analysis of the data suggest that the relationship between self-appraisal and career maturity may be a much more complex phenomenon than Crites originally postulated.

John F. Veiga (1983) conducted a study on "Mobility Influences during Managerial Career Stages" where a multivariate framework was used to determine the impact of 22 individual/career related factors on career mobility. Career mobility was represented by two criterion variables, rate of movement and propensity to move. Several of the 22 factors were found explain substantial portions of variance in both criterion variables. During the maturity stage, community ties (own and children's), time in first position, career impatience, satisfaction with advancement, and satisfaction with supervisor's technical skills appeared most influential. These findings suggest that during this period of increased lateral movement, two major obstacles to mobility are the manager's own ties to a community and those of his or her children.

Janice M. Birk and Carol A. Blimline (1984) conducted a study on "Parents as Career Development Facilitators: An Untapped Resource for the Counselor". It was investigated and asked parents about their attitudes and perceived roles. The children of those parents were asked what their first and second career choices were. The participants were 382 parents who had children enrolled in kindergarten, parents' third grade, and fifth grade and 323 children enrolled in kindergarten, third grade, and fifth grade. The parents' questionnaire included identifying information, such as sex, age, race, marital status, religion, educational level, level, occupation, and income. The findings stated that Parents' first choice of career for their children was predominantly within social.

Phyllis Post Kammer (1985) conducted astudy on "Career and Life – style Expectations of Rural Eight – Grade Students". There were 128 participants (41% boys and 59% girls) included all the eighth-grade students from a rural junior high school. The students were asked to complete I4.ltem questionnaire developed by Oregon Department of Public Instruction. The findings indicate that at the ex- eighth-grade level, boys and girls expect to take the same quantity of mathematics and science courses in high school. Students seem to be less interested in taking science classes than the mathematics classes.

Linda Seligman, Leslie Weinstock and Nancy Owings (1988) studied "The role of Family Dynamics in Career Development of 5-year-olds". The primary purpose in this study was to examine whether, how, what extent young children's perceptions of themselves and their families relate to their career development, career awareness, and work and aspirations. We also sought to provide information on children's development and career-related knowledge and ideas. The data suggest, then, that young children cannot be clearly differentiated between those who are family oriented and those who are career oriented. Rather, the patterns of the children's career development seem differentiate between those children who have and can articulate with respect to both their careers and their families and those who do not yet have such aspirations.

Rebecca Ellis, Herbert G. Heneman and III (1990) conducted a study entitled "Career Pattern Determinants of Career Success for Mature Managers" .It investigates career process variables as predictors of two objective indices of career success for a large, organizationally heterogeneous sample of managers. Specifically, career pattern data were used to predict current salary and hierarchical level among a cross-organizational cohort of 45 to 50 year-old managers. Independent variables included various measures of mobility, job tenure, job function, and career interruption. Education and employer characteristics were

statistically controlled. Results indicated that hierarchical level was negatively related to interfere mobility, while salaries were positively related to inter-industry mobility and negatively related to entrepreneurship.

Elizabeth A. Gassin, Kevin R. Kelly and John F. Feldhusen (1993) conducted a study on "Sex Differences in the Career Development of Gifted Youth". It studies development of a theory for better understanding of how gifted girls and boys develop and change their career aspirations is essential for school counselors who are formulating interventions to enable talented young women to realize potential to their academic ability in the World of work. Participants were selected from a Saturday and enrichment program for gifted students gifted sponsored by a large mid-western university. The result stated that Gifted girls were more certain than gifted boys about their about their talents and career plans in elementary schools.

Valerie Kincade Oppenheimer, MatthijsKalmijn and Nelson Lim (1997) studied "Men's Career Development and Marriage Timing during a period of Rising Inequality". **T**he approach of these study is to relate marriage formation to the ease or difficulty of the career-entry process and to show that large race/schooling differences in career development lead to substantial variations in marriage timing. Applying the regression results to models based on observed race/schooling patterns of career development, it was then estimate cumulative proportions ever married in a difficult versus an easy career-entry process. This study finds out that there were major differences in the pace of marriage formation, depending on the difficulty of the career transition. The study also finds considerable differences in these marriage timing patterns across race/schooling groups corresponding to the large observed differences in the speed and difficulty of career transitions between and within these groups.

Catherine A. Loughlin and Julian Barling (1998) studied "Teenagers' part time employment and their work related attitudes and aspirations" .It assessed the relationship between the quality (i.e., job characteristics, role stressors, and interpersonal relationships) and quantity of part-time employment, and work- related attitudes and aspirations among 349 students. Career maturity was predicted by role stressors at work, and cynicism by role stressors and satisfaction with interpersonal relationships. In contrast, job involvement was significantly related to family achievement orientation but not to any perceived job factors. These findings question the assumption that only intensive work during high school exerts negative effects for teenagers, and support the importance of employment quality for teenagers as well as adults.

Miguel Moreno, Antonio Muñoz and Mari Carmen Vacas (1999) conducted a study entitled "An experimental study of Vocational Guidance and Decision Making in Spain". It describes the procedure and methodology for a vocational guidance programme framed within the most recent approaches developed in this field. Vocational guidance is conceptualized as a systematic process of intervention that gradually optimize the subjects' vocational conduct. The programme was applied to a population of 192 subjects located in seven secondary schools in the city of Granada, with proven effectiveness of the interventions. The three objectives of the programmes applied concentrated on the increase in the optimization of self-awareness and self-concept for the subjects, training in strategies for searching for information, and training in decision-making.

Linda J. Kraus and Kenneth F. Hughey (1999) studied "The Impact of an Intervention on Career Decision-Making Self-Efficacy and Career Indecision" and highlighted, Will the level of career decision-making self-efficacy of the treatment group exceed the level of career decision-making self-efficacy of the control group upon completion

of the intervention? Will the level of career decision-making self-efficacy of the students in the treatment group be maintained weeks after completion of the intervention? Will the level of career indecision of the treatment group be lower than the level of career indecision of the control group upon completion of the intervention? Will the level of career indecision of the students in the treatment group be maintained 4 weeks after completion of the intervention? Will there be a treatment by gender interaction for career decision-making self-efficacy? The career intervention was conducted by one female counselor twice a week for a period of 4 consecutive weeks. Each lesson of the career intervention lasted approximately 50 minutes. Students who missed a lesson were sent for during the school day and received an individual or small group make-up session. No significant difference was found between and control groups in either career decision-efficacy or career indecision, and a significant by gender interaction was found for career making self-efficacy.

Wendy Patton and Peter A. Creed (2001) studied "Developmental issues in career maturity and career decision status" some logical issues in career decision and career maturity status. The career decision scale was used to measured career certainty and indecision. The result s of the study illustrate developmental differences in career maturity. Regarding the age and career indecision, the findings were very complex. There was a significant difference in the indecision scores of 12 and 14 years old and in 14 and 17 years old. Adolescents reported higher certainty at ages 13 and 14 years, with female participants being significantly higher than male participants on this construct.

Wendy Patton and Peter A. Creed (2003) studied "Components of Career Maturity in School Based Adolescents". Three hundred and sixty-seven secondary school students across five year levels (8–12) were assessed for levels of career maturity (attitude and knowledge), work commitment, work value, career decidedness (indecision and certainty), career decision making self-efficacy and self-esteem, and indicated their age, gender,

socioeconomic status, school achievement and work experience. Using two multiple regression analyses, the predictor variables were able to account for 52% of the variance of career maturity attitude, and account for 41% of the variance of career maturity knowledge. Self-efficacy, age, career decidedness (certainty) and work commitment were the main predictors of career maturity attitude. Age, gender, career decidedness (certainty), work commitment and career decidedness (indecision) were the main predictors of career maturity knowledge. Results demonstrated the importance of examining two aspects of career maturity (attitude and knowledge), and were discussed in the context of Super's (1957, 1990) theory of career development.

Cass Dykeman, Chris Wood, Michael A. Ingram, Dale Pehrsson, Naomi Mandsagerand Edwin L. Herr (2003) studies "Career Development Interventions and its Implications for School Counselors". The participants for this study were drawn from a random sample of 12% (n = 194) of the membership of the Guidance Division of the Association for Career and Technical Education (ACTE). The researchers examined research articles, grant reports, and program manuals in order to develop a comprehensive list of career development interventions that commonly occur in American secondary schools. Drafts of this list were circulated to career development professors and practitioners around the country for feedback. These career development professionals were asked to recommend additions and sub- tractions to the list as well any nomenclature revisions. The research team incorporated their feedback into a final list of 44 interventions. This list represented the first comprehensive articulation and demarcation of the universe of career development interventions. This list formed the foundation for the survey sent to the participants. This study produced the first taxonomy of the career development interventions that are provided through American secondary schools. The results suggest that there is an underlying four-part structure to this universe of interventions. The four intervention taxa were denoted Work-

Based Interventions, Advising Interventions, Introductory Interventions, and Curriculum-Based Interventions.

S. Coertse& J.M. Scepers (2004) studied "Personality and Cognitive Correlates of Career Maturity". The principal objective of this study was to determine the personality and cognitive correlates of career maturity. The sample comprised 1476 first-year students from different faculties at a South African university. The Career Development Questionnaire was used to determine the career maturity levels of the respondents. Based on the scores in respect of the Career Development Questionnaire the respondents were divided into a career mature, a career immature and a middle group. These groups were then compared in respect of various personality and cognitive constructs. Statistically significant differences were found in respect of most of the personality constructs but not in terms of the cognitive constructs. The implications of the findings are discussed.

Harry L. Legum and Carol H. Hoare (2004) studied **"**Impact of a Career Intervention on At-Risk Middle School Students' Career Maturity Levels, Academic Achievement, and Self-Esteem" .It assessed the effects of a 9-week career intervention program on at-risk middle school students' career maturity levels, self-esteem, and academic achievement. This study was based on a pretest and posttest design using a control group. Data were collected from 27 at-risk middle school students representing the experimental group and 30 at-risk middle school students making up the control group. Modes of measurement consisted of the Crites Career Maturity Inventory (measuring attitude and competency levels), the Cooper smith Self-Esteem Inventory, and grades. Data for this study were coded numerically and analyzed using inferential t tests and analysis of covariance. Qualitative interviews were con- ducted with teachers of 5 randomly selected participants from the experimental group to compare self- esteem and academic achievement prior and

subsequent to the treatment. Although results revealed that the sample's career maturity attitude and competency levels and academic achievement improved, such increases were not statistically significant. Recommendations for future research and implications for school counselors are discussed.

Renée Punch, Peter A. Creed and Merv Hyde (2005) studied **"**Career Barriers Perceived by Hard-of-Hearing Adolescents: Implications for Practice from a Mixed-Methods Study" and investigating the career development of hard-of-hearing high school students attending regular classes with itinerant teacher support. We compared 65 hard-of-hearing students with a matched group of normally hearing peers on measures of career maturity, career indecision, perceived career barriers, and three variables associated with social cognitive career theory career decision-making self-efficacy, outcome expectations, and goals. Two high school student samples were recruited for the study. The first consisted of 65 students who had bilateral sensory neural hearing losses. Thus, this study's results did not support the expectation that hard-of-hearing students would lag behind their normally hearing peers on measures of career maturity. A possible explanation for these findings is that, in their mainstreamed setting, these hard-of-hearing students were as exposed to, and had received a similar benefit from, career education and career development influences as other students.

UpmaDhillon&Rajinder Kaur (2005) studied "Career Maturity among the Students of Public and Government Schools". A dense sample of 500 high school students were the subjects of this study (250 males and 250 females). The Crites' career maturity inventory (CMI), self-concept scale (SCS), achievement motivation test (ACMT), and Lumpkin's locus of control scale (LOC) were administered to the students to study the relationship between career maturity and self-concept, achievement motivation and locus of control. On

comparison of public and government schools, the results clearly indicate that the students of public schools possess a higher career maturity attitude (CMA), career maturity competence (CMC), as well as self-concept and achievement motivation. Significant relationships have also been obtained between CMA and CMC, internal LOC and ACMT in case of boys in public schools and between CMA, ACMT and SCS in case of girls in public schools. On the other hand significant relationship has been found between CMA and external locus of control, achievement motivation and self-concept in case of boys in government school and between CMC and achievement motivation in case of girls in government schools.

Melanie J. Zimmer-Gembeck and Jeylan T. Mortimer (2006) studied **"**Adolescent Work, Vocational Development, and Education" and examined the consequences of adolescents' employment experiences for vocational development and educational pursuits within varying historical and social contexts. Attention is directed to the changing social and cultural context for adolescent paid work, the balance of school and work, the influence of work experience on adolescent vocational development and educational/career achievement, and theoretical approaches that guide contemporary vocational development and career maturity studies. The study then address research design issues and directions that are needed to enhance understanding of the role of work in adolescents' lives and to inform social policies and interventions. This study finds out that there is substantial longitudinal evidence that adolescents' time use-including work and other activities-is not distributed randomly.

Renee Punch, Peter A. Creed and Merv B. Hyde (2006) studied "Career Barriers Perceived by hard-of-hearing Adolescents". This study incorporated both quantitative and qualitative methods to examine the perception of career barriers by hard-of-hearing high school students being educated in regular classes with itinerant teacher support. Sixty-five students in Years 10, 11, and 12 completed a questionnaire about potential general and

hearing-related barriers, and 12 of these respondents were subsequently interviewed. Findings indicated that other people's lack of understanding of their hearing loss constituted the greatest potential barrier to adolescents' educational and career goals. Students anticipated several other barriers in the form of functional hearing-related difficulties. Most students showed little awareness of helpful strategies or job accommodations and some had prematurely foreclosed on career choices. Implications for practice are outlined, and recommendations for teachers and career counselors are made.

Meredith J. Greene (2006) conducted a study on **"**Helping Build Lives: Career and Life Development of Gifted and Talented Students" argued that gifted individuals are capable of or demonstrate superior performance. Career counseling of gifted and talented students must acknowledge the unique career and life development issues that may impact their career planning. Common issues are multi-potentiality, early emergence and foreclosure, personality traits, the overemphasis on academics, and the expectations of others. School counselors should consider adjusting the timing, pace, complexity, and intensity of career activities to suit the advanced cognitive levels and/or issues of gifted students.

Kaoru Kawai & Yoshihiko Yamazaki (2006) studied "Effects of Career Maturity and Support Networks in Workplace". Questionnaire were sent to 890 graduates of humanities departments at four Universities in the Tokyo metropolitan area who were scheduled to enter the workplace in April 2003. The authors created a career maturity scale with 11 items that assessed subject's career interest, planning and autonomy. The *t-test* and ANOVA were also used to analyse the data. The result of the study was that newcomers with a high level of career maturity were successful in constructing positive relationships with superiors and co-workers.

Tom-Erik Dybwad (2008) studied "Career Maturity: Contributions to its Construct Validity" and developed measures of career maturity and starts exploring its nomological net, that is the antecedents and, at a later point in time, the consequences of various aspects of career maturity. Given the problems with existing measures along with the fact that existing measures of career maturity primarily focuses on college students, the intention of the first paper was to develop a new measure of career maturity, coined Daidalos, primarily intended for use with junior high and high school students, and to explore it's structural aspects. However, due to several methodological shortcomings such as suboptimal fit for boys, no direct comparison across gender, an exclusive reliance on global assessment of fit, and, in retrospect, a theoretically unjustified higher-order analysis, a second round of data collection and analysis was undertaken. Summarizing the results obtained in these papers, the covariance structure part of the analysis indicated that three cross-loadings were non-invariant across the two groups. Future research should attempt developing new items so as to render these unnecessary. The item correlation matrix also revealed that items measuring Need for world-of-work information did not demonstrate satisfactory discriminant validity from the items tapping Career uncertainty. The reason for this is unclear, since these groups of items are theoretically distinct. Maybe the kids are drawing causal inferences when they respond to these items in the sense that they perceive that amount of Career uncertainty is "caused" by their lack of world-of-work information.

Hasan Bozgeyikli, SusranErkanEroğlu& Habib Hamurcu (2009) studied "Career Decision Making and Career Maturity Status of the Youth Turkish". The socioeconomic status of the young people is one of the important factors which have effect on either their career decision making self-efficacy or their career maturity. This research was carried on by Survey method and it was tried to determine the effect of socio economic status on related variables by describing career decision making self-efficacy and career maturity of young

people who are at different socioeconomic status. The research was conducted with 346 Turkish young people who were determined by random sampling method. The research findings showed that there was a significant relationship between career decision making self-efficacy and career maturity with socioeconomic status. On the other hand it was observed that career decision making self-efficacy and career maturity of young people whose socioeconomic status were different differed in a significant level. The results determine that there is a significant difference between SES and CDMSE and CM when findings are assessed generally in this research which observed SES, CM levels and CDMSE levels of Turkish adolescents.

Precious BupeMubiana (2010) conducted a study entitled "Career Maturity, Career Knowledge, and Self-Knowledge among Psychology Honors Students: An Exploratory Study" .A mixed method approach was used to collect data among (N=62) students who were asked to fill in two career development questionnaires namely, the Career Decision-making Difficulties Questionnaire (CDDQ) and the Career Development Questionnaire (CDQ). 10 scales were measured using the CDDQ. Analysis of the CDDQ revealed moderate difficulties on the General Indecisiveness, Dysfunctional Beliefs and Occupational Information scales. Pertaining to the CDQ, 5 distinct scales which explore the levels of Self information (Self-knowledge), Decision making, Career information (Career knowledge), Integration of self-information and career information, and Career planning were assessed. Analysis of the CDQ revealed that respondents had adequate levels of career maturity. The results of the content analysis on the qualitative data indicate clinical psychology to be the most popular in relation to other fields of study, followed by research psychology counseling psychology and psychometry.

Catherine Hughes (2011) conducted a study entitled "A Cross-Cultural Study of Career Maturity in Australia and Thailand" to assess the psychometric properties and cross-

cultural equivalence of the adapted Thai instruments. Data were gathered from 159 Grade 9 and Grade 11 students in Thailand and 218 Grade 9 and Grade 11 students in Australia. The Thai adaptations of the Career Planning scale, the Self-Description Questionnaire II and Parental Bonding Instrument were found to have adequate internal consistency reliability. Equality of the Thai and Australian internal consistency reliability coefficients was established for all instruments and scales except the Self-Description Questionnaire II Parent Relations and General Self scales. Test-retest reliability over a 10-day interval was adequate except for the Same Sex Relations and Father Overprotection scales. Principal component analysis and computation of congruence coefficients supported the construct validity and equivalence of the Career Planning scale, the Same Sex Relations, Opposite Sex Relations, Parent Relations, Mathematics and Verbal self-concept scales, and the parental Care and Overprotection scales. This study has several implications. The need for rigour when adapting psychological instruments for cross-cultural research and for critical evaluation of the cultural applicability of Western psychological theories and instruments for use in multicultural or cross-cultural contexts were highlighted. This study produced reliable, cross-culturally valid and unbiased scales to measure orientation towards career planning, domain-specific self-concept and parenting style across Thai and Australian cultural contexts and a linguistically equivalent measure of individualism collectivism.

Lazarus, Kelechi U, ChinweIhuoma (2011) studied "The Role of Guidance Counsellors in the Career Development of Adolescents and Young adults with Special Needs". The authors argued that Guidance counsellors work individually and with other educators to meet the developmental needs of all students, including those with special needs or disabilities. Significantly, they focus on the academic, career, and personal/social developmental needs of all students, including those with special needs. Inconsistencies in the roles of practicing guidance counsellors have caused some specialists in education to begin to

address the emerging role of the counsellor regarding students with special needs, especially with respect to their career development. Since the level of happiness an individual exudes in life is closely related to the type of career the person chooses, and other career development activities relating to job retention and advancement, guidance counsellors must endeavor to expose their students to several career development activities in order to help them to successfully, choose occupations, prepare for, enter into and progress in them. This paper discusses what career development is and some theories of career development. It also discusses factors that affect career choice. It highlights who the special needs persons are as well as the role of guidance counsellors in career development of special needs adolescents and young persons.

Sherri L. Turner and Julia L. ConkelZiebell (2011) studied "The Career Beliefs of Inner-city Adolescents". Results identified six types of beliefs: success is related to effort, job satisfaction, interest and liking, flexibility/adaptability, achievement and persistence, and toleration of uncertainty. A majority of these young people believed that their success was not related to their efforts and had beliefs inconsistent with flexibility/adaptability. Findings are interpreted in light of Happenstance Learning Theory. The results of this study have revealed the complex nature of inner-city adolescents' career beliefs. Although some beliefs are not adaptive, the picture is not grim for these young people as they have other beliefs that could help position them to be more successful in the world of work. However, this does not negate the fact that offering counseling interventions that address their less adaptive career beliefs can be valuable for inner-city students.

Caroline Hoorn (2013) studied"Career maturity amongst first year university students in a commerce faculty at a tertiary institution in the western cape" the prevalence of specific aspects of career maturity (namely, self-information, decision-making, career information, integration of self-information and career information, and career planning). In

addition, the correlations between the aspects of career maturity and certain biographical variables such as age, gender and race were examined. The sample group (N=303) consisted of first year university male and female students in the commerce faculty at a tertiary education institution in the Western Cape. The results indicate that there is a statistically significant relationship between self-knowledge, career information, career planning, integration of self and career information, decision-making and career maturity amongst students who participated. While there were no statistically significant differences in career maturity based on age and gender, there were some race differences in career maturity. The results yielded some interesting findings, but need to be interpreted with caution since a convenience sample was used, thus restricting the generalizability to the wider population of students.

Mustafa Tekke and Dr. Muhammad Faizal A. Ghani (2013) studied **"**Examining the level of career maturity among Asian foreign students in a public university: gender and academic achievement".This studyexamined the level of career maturity of international students in a public university in Malaysia by analyzing gender and academic grade point average by using the Career Maturity Inventory. Two hundred and twenty nine (Male=106, Female= 123) international students studying in various semesters completed the Career Maturity Inventory and the scores of the female international students on the CMI suggested that they had greater compromising their desires with reality and knowledge about their career. Results indicated that female students are fairly high in career maturity than male students on the CMI. The results also showed that the higher the career maturity, the higher the grade point average. However, the level of significance is slightly weak; this result should be viewed with caution. These findings suggest that level of career maturity of international students' needs to be considered in relation to variables such as culture and academic grade.

Quinter Migunde, Lucas Othuon& Catherine Mbagaya (2015) studied "Career maturity and Career Decision Making Status of Secondary School Students in Kisumu Municipality Kenya" .This study tried to establish the career maturity and career decision making status of secondary school students in Kisumu Municipality and to determine the relationship between career maturity and career indecision of secondary school students in Kisumu Municipality, Kenya. A sample of 370 secondary school students from year one to year four were surveyed on career maturity and career indecision. The current study found that students from public schools are more career mature and have lower career indecision than their counter parts from private schools, receiving career counseling significantly increases one's level of career maturity and females scored significantly higher on career indecision. Career maturity was found to be a significant predictor of career indecision. Based on the results, the researcher came to the conclusion that the type of school a student attends and career counseling has significant influence on their career maturity and decision making status. As career maturity increases, students' level of career indecision decreases. Secondary school students should be provided with adequate career information encouraged to explore various careers and consult widely so as to improve their levels of career maturity.

AmtoorPavana Rao &Jayasankar Reddy (2015) studied "The relationship between Meta Cognition and Career Maturity among Adolescents". These study examines the relationship between meta cognition and career maturity in adolescents in the age range of 16-18 studying in II year Pre- University/ 12th standard (n=60). Two standardized tools were used in the research, Meta cognitive Awareness Inventory and Career Maturity Inventory (Indian Adaptation). Two groups of students, Group A (students studying in the Science Stream) and Group B (students studying in the Arts Stream) were compared. The data findings suggest that Meta cognition level and career maturity was not significantly related. There were no significant gender differences on all parameters. Though the level of meta-

cognitive awareness was not significantly different between the groups there was a significant difference in self-appraisal component of career maturity. The role of Meta cognition in career decision making needs to be explored in more detail in a larger sample.

CHAPTER III

METHODOLOGY

INTRODUCTION

In the preceding chapter, the problem, its statement, related literature and hypotheses of the study were discussed. This ongoing chapter treats the method and procedure employed in this study. Data are like raw materials without which production in research is impossible. In collection of data, the investigator has to set up the design, describe the sampling method, the nature of population and sample, the tools employed for the collection of data, tabulation organization and statistical technique used. Therefore, the present chapter envisages the research method, sampling procedure, research tools, collection of data, scoring and statistical techniques.

3.1Design

For carrying out any kind of research, it is important to chalk out a design. All researches involve elements of observation, description and the analysis of what happens under certain circumstances. A systematic procedure is a must to collect the necessary data, which helps to attain the objectives and to test the hypotheses formulated for the study. The present study is essentially a descriptive survey method. It is descriptive because it aims to describe the nature and present status of the phenomenon with the intent of employing data to justify current conditions and practices or to make more intelligent plans for improving them. A descriptive study describes and interprets what is, recording, describing, analyzing and interpreting conditions that exist. It involves some kind of comparison or contrast and attempts to discover relationship between existing non-manipulated variables. It is concerned with opinions that are held, processes that are going on, effects that are evident or trends that

are developing. It is primarily concerned with present, although it often considers past events and influences as they relate to current conditions. It also deals with testing of hypotheses and elements of generalization. The present study has been carried out in accordance with the requirements of the descriptive design.

3.2 SAMPLING PROCEDURE

It is not possible to collect data from all the members of a population and the investigator resorted to sampling technique. Sampling implies any portion of a population or universe taken as representative of that population or universe.

In the present study, the population is very large and scattered over all the colleges of Aizawl district. The investigator, therefore, has employed the random sampling technique in order to select a representative sample of the entire population. Out of the total 14 colleges, 6 colleges i.e.Pachhunga University and Zirtiri Residential College (Science), Aizawl North and J.Thankima College (Arts),Hrangbana and Govt. Aizawl College (Commerce) has been randomly selected for investigation. Again from each of the 6 selected colleges, 100 students from each stream were then randomly selected.

The final sample consists of 300 students, 150 male and 150 female. The detailed split up of the sample is shown in table 3.1:

Table 3.1

DISTRIBUTION OF THE SAMPLE COLLEGE STUDENTS OF AIZAWL DISTRICT

Sl.No	COLLEGE WISE	No. of Male	No. of Female	Total no of Students
1	Govt. Aizawl North College	30	29	59
2	Govt. J. Thankima College	20	21	41
3	Govt. Hrangbana College	9	13	22
4	Govt. Aizawl College	41	37	78
5	Pachhunga University College	25	25	50
6	Govt. Zirtiri Residential Science College	25	25	50
Total		150	150	300

Table 3.2

DISTRIBUTION OF THE SAMPLE IN STREAM WISE AND GENDER WISE OF COLLEGE STUDENTS OF AIZAWL DISTRICT

Sl.No	STREAMS	GENDER	No.	TOTAL no.
1	ARTS	Male	50	100
		Female	50	
2	COMMERCE	Male	50	100
		Female	50	
3	SCIENCE	Male	50	100
		Female	50	
			TOTAL	300

3.3 Tools

The earnest efforts were made to choose appropriate standardized tools to measure Creativity and Career Maturity. The tools were selected because of their suitability to the sample and vigorous standards of reliability and validity as psychometric instruments. The following tools were employed for data collection:

1. Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi. (1973)

2. Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta. (1989)

3.3.1 Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi:

The verbal test of creativity includes four sub-tests, namely, consequences test; unusual uses test, similarity test, and product improvement test.

(i) Consequences Test – The consequences test consist of three hypothetical situations: (a) what would happen if man could fly like birds? (b) What would happen if our school had wheels? (c) What would happen if man does not have any need for food?

The subject is required to think as many consequences of these situations as he can, and write them under each situation in the space provided. The situations being hypothetical, minimize the effect of experience and also provide the subject with an unlimited opportunity to make responses. The test encourages free play of imagination and originality. An example is given on the test booklet to acquaint the subjects with the nature of the test. The time allowed for the three problems is 4 minutes each.

(ii) Unusual Uses Test – This test presents the subject with the names of three common objects-a piece of stone, a wooden stick, and water – and requires him to write as many novel, interesting and unusual uses of these objects as he may think of. This test measures the subject's ability to retrieve items of information from his personal information in storage. Evidently, it measures also the subject's ability to shift frames of references to use the environment in an original manner. The time allowed for the three tasks is 5 minutes each.

(iii) Similarity/New Relationship Test –This test presents the subject with three pairs of words apparently different-tree and house, chair and ladder, air and water, and requires him to think and write as many novel relationships as possible between the two objects of

each pair in the space provided. The test provides' an opportunity for the free play of imagination and originality. The time allowed for each pair of words is 5 minutes.

(iv) Product Improvement Test – In this test, the subject is asked to think of a simple wooden toy of a horse and suggest addition of new things to it to make it more interesting for the children to play. This task takes the child to the world of imagination and spurs him to think in different directions. Apart from ideational fluency, the test also measures flexibility and originality.

3.3.2 Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta:

The Career Maturity Inventory (CMI) (Crites 1973, 1974a, 1974b) has been conceived and constructed to measure the maturity of attitudes and competencies that are critical in realistic career decision making. To assess the maturity of these career behaviors, the CMI provides two types of measures: the Attitude Scale and the Competence test.

The Attitude Scale elicits the feelings, the subjective reactions, the dispositions that the individual has toward making a career choice and entering the world of work. Five attitudinal variables being surveyed by Attitude Scale are:

(i) Decisiveness in career decision making.

(ii) Involvement in career decision making.

(iii) Independence in career decision making.

(iv) Orientation to career decision making.

(v) Compromise in career decision making.

The scale thus maps the conative aspects of decision making. The Competence Test measures the cognitive variables in choosing an occupation. These include appraisal of the individuals job related capabilities (strengths and weaknesses), knowledge about the world of

work, aptness in matching personal characteristics to occupational requirements, foresight in planning for a career and effectiveness in dealing with the problems which arise in the course of career development. In all, then, there are five parts of the Competence Test.

Part 1-Self Appraisal (SA) (Knowing yourself)

Part 2-Occupational Information (OI) (Knowing about jobs)

Part 3-Goal Selection (GS) (Choosing a Job)

Part 4-Planning (PL) (Looking ahead)

Part 5-Problem Solving (PS) (What should they do?)

Taken together, the Attitude Scale and the Competence Test provide both an extensive inventory of the critical behaviors in mature career decision making and development.

3.4 Data collection

The two tools selected in the study were administered to students of the selected college. The tests were administered in-group setting in a uniform sequence, in order:

1. Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi (1973).

2. Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta (1989).

Principals of these colleges were contacted to seek their cooperation for collecting data of the study. The testing conditions for all the students were kept as constant and uniform as possible. Before starting the testing session, it was ensured that subjects were seated comfortably in a room where there was no outside disturbance. The help of the lecturer was also sought in administering the tests. Before the actual tools were administered, the

subjects were acquainted with the purpose of the investigation. This was done to establish rapport and to make them feel at home. They were told that the results of the tools would be kept strictly confidential. Instructions for each tool, as mentioned in the test manual, were read out to the subjects and they were also requested to go through the instructions printed at the cover page of the each tool. In case of Creativity test, separate instructions were given in the beginning of each sub-test. Through instructions, subjects were cautioned to give sincere response. They were made to feel that they would enjoy the activities and have fun in these tests. The response sheets were collected after the allotted time. Care was taken to ensure that all the questions had been answered. Those answer sheets where the answers were missing, were given to the same subjects for completion. For the administration of the tests, about three and a half hours' time was spent in each colleges including a short break of thirty minutes for refreshment. Same procedure for data collection was adopted by the investigator in all colleges.

3.5 Scoring

Since the present study is relationship study which requires two tools, following will describe the scoring of the two tools.

3.5.1 Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi:

The scoring of TCW is a little bit tricky. However, it was scored following the pattern suggested by the author of the scale. As there is no right or wrong responses for the test, much care had been exercised at the time of scoring. Each item in the questionnaire is scored for fluency, flexibility and originality. The weightage score for fluency and flexibility is 1(one) per response.

Scoring for fluency - Fluency is represented by number of relevant and unrepeated ideas. Relevance is judge on the basis of the appropriateness of the response. The weightage score is 1(one) per response.

Scoring for flexibility - Flexibility is represented by a person's ability to produce ideas which differ in approach or thought trend. All ideas which fall under one category of approach or thought trend are treated as one for purposes of flexibility scoring. Thus if five ideas are produced and all belong to only one category of approach or thought trend, then the score for flexibility will be 1(one), but if all the five ideas are based in five different approaches or thought trends, then the flexibility score will be 5(five).

Scoring for originality - For originality, a separate scoring guide has been developed, which is attached in the appendix. Originality is represented by uncommonness of a given response. Responses given by less than 5% of the group are treated as original. The more uncommon the response, the higher the originality weight. The weights for originality have been determined on the basis of the following scheme. Response given by 1% to 99% get an originality weight of 5, 1% to 1.99% get 4, 2% to 2.99% get 3, 3% to 3.99% get 2 and responses given by 4% to 4.99% of the testees gets originality weight of 1. Responses given by 5% or more will get originality weight of zero.

A table has been provided in the scoring-sheet to summarize the scores for fluency, flexibility and originality obtained by the testees on difficult activities. The total fluency, flexibility and originality scores were entered in the appropriate columns of the table.

3.5.2 Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta:

Scoring for CMI is done in order of the manual. The provided scoring stencils were used which provide maximum consistency and accuracy in scoring.

In Test I - Attitude Scale, the correct responses of each item is visible in the circle of scoring stencil. If marked responses are visible in the scoring stencil, the responses are treated as correct and for one correct response, one mark is assigned. The total number of correct responses in this test is known as the raw score of test I.

In Test II - Competence Test, the correct responses for each of the five parts are also visible in the circle of the scoring stencil. A correct response is one for which the scoring stencil alternative are only marked. One mark is assigned for each correct response area wise and the total is known as the raw score of that sub test.

An omitted or multiple marked items is treated as a wrong response and 0 score is assigned to it.

3.6 Statistical Techniques for Analysis of Data:

The tabulated creativity and career maturity scales were classified in accordance with gender and streams of study. For analyzing the data, the investigator employed the following statistical techniques:

1. Percentage to study the level of distribution of creativity and career maturity scores of different categories of respondents.

2. Frequency distributions to find out the Mean and Standard Deviation of different categories of respondents.

3. ‘t’ Test to find out the significance of difference of different categories of respondents.

4. ANOVA to find out the significance of difference in streams of different categories of respondents.

5. Co-relation to find out the relationship between creativity and career maturity of all the respondents.

CHAPTER IV

ANALYSIS AND INTERPRETATION

The data for the present study were collected using Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi (1973) and Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta (1989). The responses obtained from the subjects were scored following the standard scoring procedures described in the manual. The scores were classified, tabulated, analyzed and the details are given in the present chapter. Analysis and interpretation of data is a crucial step in educational research after which the results can be out streamed.Keeping in view the objectives of the study, the findings were meaningfully interpreted as follows:

4.1 Objective 1. The first objective was to find out the level of creativity among college students of Aizawl District

In order to find out the level of creativity among college students of Aizawl District, Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi (1973) was administered to all the 300college students of Aizawl District. Then all the scores were calculated, tabulated and analyzed. Since there are no separate norms the scores were interpreted as those scores which are 1SD above the mean are termed as ‘high creativity’ and those scores which are 1SD below the mean are termed as ‘low creativity’.

Table 4.1

Level of creativity among college students of Aizawl District

VARIABLE	N	Mean	SD
Creativity	300	46.26	19.78

Table 4.2

Level of creativity among college students of Aizawl District

Levels of Creativity	Score
High	119 (39.67)
Low	181 (60.33)

(Figure in parenthesis are given in percentage)

Table 4.1 and 4.2 shows the overall level of creativity of students. It can be seen that out of 300 students the mean score of college students of Aizawl District on their level of creativity was 46.26.Using the interpretation table 4.2, out of 300 students 119 (39.67%) students were high in their level of creativity and 181 (60.33%) students were low in their level of creativity .It can be seen from the given table 4.2 that, 60.33% students were low in their level of creativity which means that the overall scores of college students of Aizawl District had low level of creativity.

4.2 Objective 2. The second objective was to find out the career maturity level among college students of Aizawl District

In order to find out the career maturity level among college students of Aizawl District, Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta (1989) was administered to all the 300 college students of Aizawl District.Then all the scores were tabulated and analyzed. The students whose score range in between 80 - 120 were considered as high level, scores ranging between 40 – 79.99 were considered as average level and scores ranging between 0 - 39.99 were considered low level of career maturity.

Table 4.3

Level of career maturity among college students of Aizawl District

VARIABLE	N	Mean	SD
Career Maturity	300	61.23	16.33

Table 4.4

Level of career maturity among college students of Aizawl District

Levels of career maturity	Score N=300 (100)
High	40 (13.33)
Average	222 (74)
Low	38 (12.67)

(Figure in parenthesis are given in percentage)

Table 4.3 and 4.4 shows the overall level of career maturity amongcollege students of Aizawl District. It can be seen that out of 300 students the mean score of college students of Aizawl District on career maturity level was 61.23. And out of 300 students, only 40 score above 80 which indicate that only 13.33 % students were high in their level of career maturity, and 38 students score below 39.99 which indicate that 12.67 % students were low in their level of career maturity and 222 students' scores range between 40 – 79.99 which indicate that 74 % students were average in their level of career maturity. This indicates that, the overall average scores of college students of Aizawl district falls within the average levelof career maturity.

4.3 Objective 3. The third objective was to compare the level of creativity with reference to gender

In order to find out the level of creativity with reference to gender, the following null hypothesis was formulated:

Null hypothesis 1: There is no significant difference between male and female college students of Aizawl District in their creativity

4.3.1 Objective 3 (a): Level of creativity between male and female college students of Aizawl District

This sub section includes the male and female percentage scores of level of creativity among college students of Aizawl District.

Male and female scores were computed separately and analyzed using percentage and t ratio to see the gender difference. Following table 4.5is the percentage representation between male and female college students of Aizawl District in their level of creativity.

Table 4.5

Level of creativity between male and female college students of Aizawl District

Levels of creativity	**Gender**	
	Male **N=150** **(100)**	**Female** **N=150** **(100)**
High	65 (43.33)	54 (36)
Low	85 (56.67)	96 (64)

(Figure in parenthesis are given in percentage)

Table 4.5 shows the performance of male and female level of creativity among college students of Aizawl District. There were 150 male and 150 female. Out of 150 male, 65 students which is 43.33 % were high in their level of creativity and 85 students which is 56.67% were low in their level of creativity. And out of 150 female, 54 students which is 36% were high in their level of creativity and 96 students which is 64% were low in their level of creativity. Figural representation follows at figure 1;

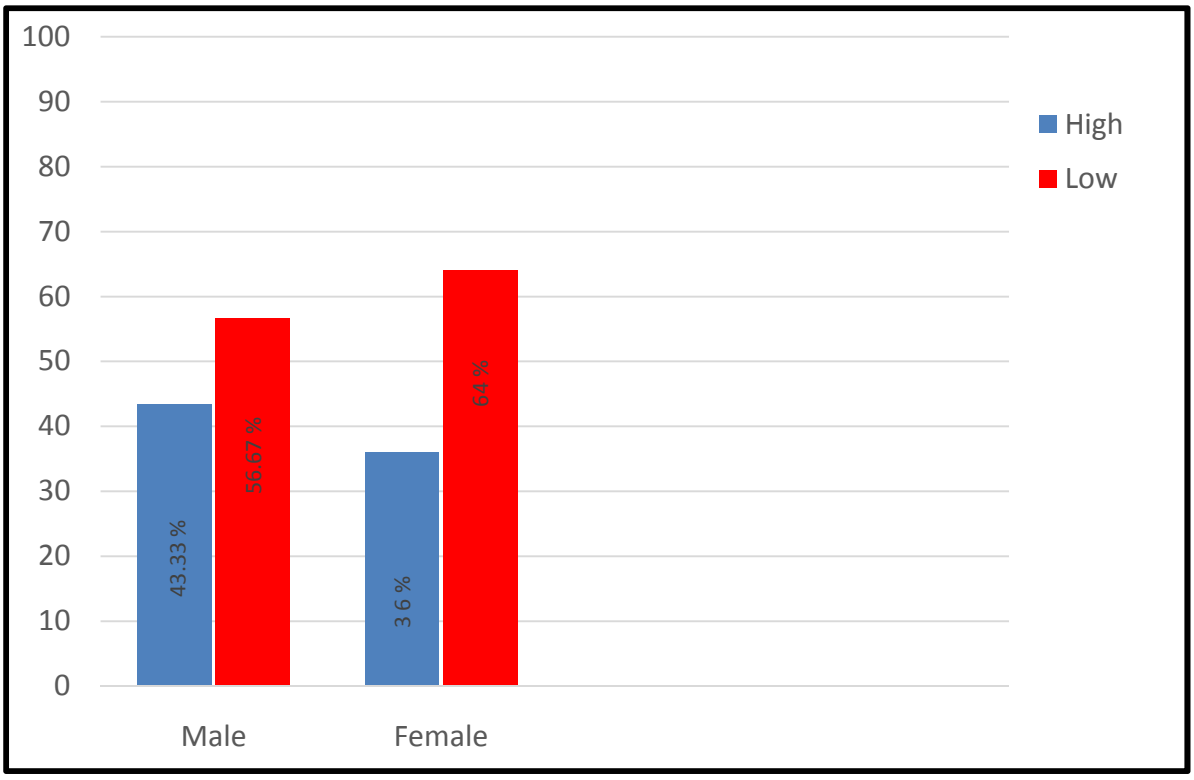

Figure 1: Level of creativity between male and female college students of Aizawl District

4.3.2 Objective 3 (b):Comparison of level of creativity between male and female college students of Aizawl District

This sub section includes the comparison between male and female college students in their level of creativity.

In order to find out the significance of difference between male and female college students of Aizawl District, statistical analysis of t-value between male and female on the level of creativity was calculated and analyzed.

Table 4.6

Comparison of level of creativitybetween male and femalecollege students of Aizawl District

Dimensions of creativity	Male		Female		t value	Significance
	Mean	SD	Mean	SD		
Fluency	20.27	8.93	19.53	8.80	.723	NS
Flexibility	13.13	5.49	14.13	6.08	.494	NS
Originality	13.45	7.42	11.99	6.55	1.815	NS
Total Creativity	46.86	19.60	45.65	20.07	.527	NS

NS= Not Significant

Table 4.6 reveals the‘t’ value for the three dimensions of creativity and also thetotal creativity significance of difference between male and female college students of Aizawl District. It is evident from table 4.6 that, there was no significance difference between male and female college students in all the three dimensions of creativity i.e. fluency, flexibility and originality. The ‘t’ value for fluency is .723,‘t’ value for flexibility is .494, ‘t’ value for originality is 1.815 and the total creativity ‘t’ value is 0.527.Whereas the required‘t’ value, with df = 298 at 0.05 is 1.97 and 0.01 is 2.6. Since, all the calculated‘t’ value of all the dimensions is lower than the required ‘t’ value, therefore, it can be concluded that there is no

significant difference between these two groups of respondents with regard to their level of creativity.

Therefore, the null hypothesis that assumes no significant difference between male and female college students of Aizawl District in their creativity is accepted.

4.4 Objective 4. The forth objective was to compare the level of career maturity with reference to gender

In order to find out the level of career maturity with reference to gender, the following null hypothesis was formulated:

Null hypothesis 2: There is no significant difference between male and female college students of Aizawl District in their career maturity

4.4.1 Objective 4 (a): Level of career maturitybetween male and female college students of Aizawl District

This sub section includes the male and female percentage scores of level of career maturity among college students of Aizawl District.

In order to find out the level of career maturity with reference to gender, all the scores were computed, male scores and female scores were computed separately and analyzed using percentage. Following table 4.7 is the percentage representation between male and female college students of Aizawl District in their level of career maturity.

Table 4.7

Level of career maturity between male and female college students of Aizawl District

Range of Score	Interpretation	Gender N=300	
		Male N=150 (100)	**Female N=150 (100)**
80-120	High	22 (14.67)	18 (12)
40-79.99	Average	110 (73.33)	113 (75.33)
0-39.99	Low	18 (12)	19 (12.67)

(Figure in parenthesis are given in percentage)

Table 4.7shows the performance of male and female level of career maturity among college students of Aizawl District. There were 150 male and 150 female. Out of 150 male, 14.67 % were high in their level of career maturity, 73.33% were average in their level of career maturity and 18% were low in their level of creativity. And out of 150 female, 18% were high in their level of creativity, 75.33% were average in their level of career maturity and 19% were low in their level of career maturity. Figural representation follows at figure 2;

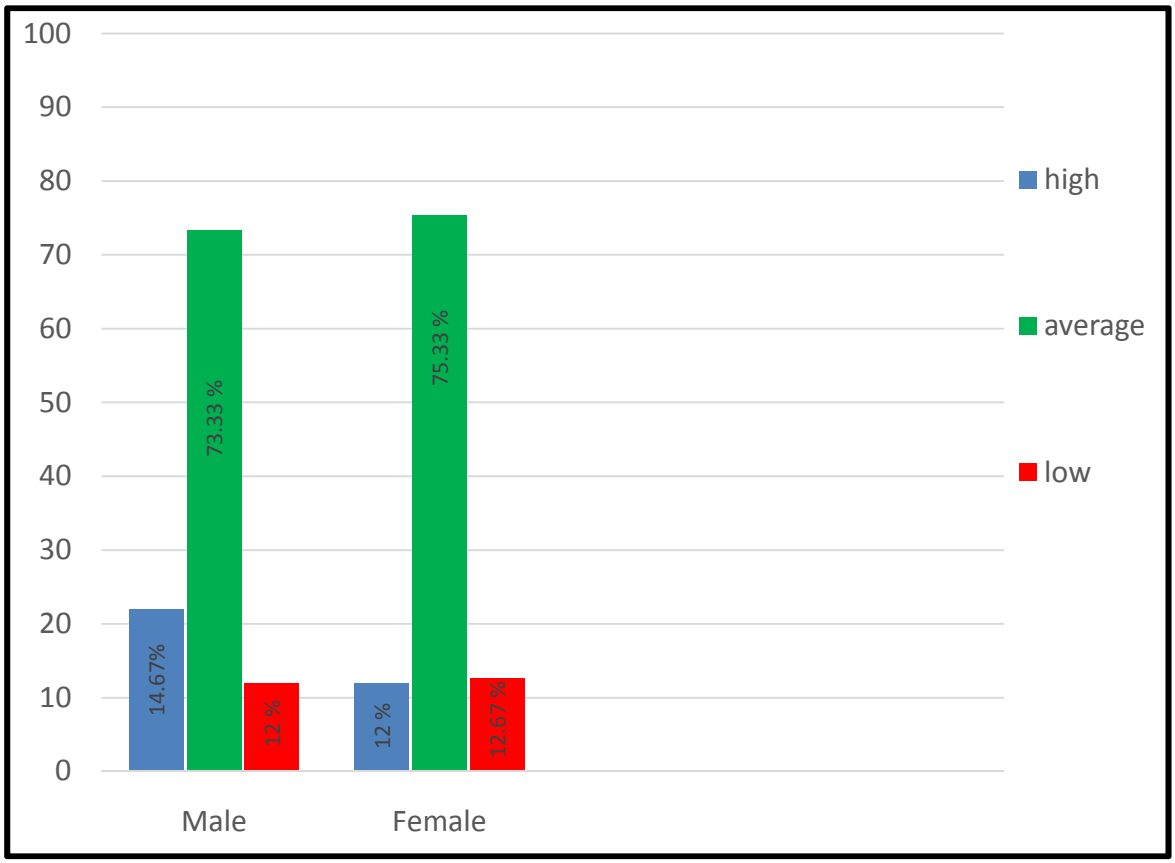

Figure 2: Level of career maturitybetween male and female college students of Aizawl District

4.4.2 Objective 4 (b):Comparison of level of career maturity between male and female college students of Aizawl District

This sub section includes the comparison between male and female college students in their level of career maturity.

In order to find out the significance of difference between male and female college students of Aizawl District, statistical analysis of t-value between male and female college students of Aizawl District on the level of career maturity was calculated and analyzed.

Table 4.8

Comparison of level of career maturity between male and female college students of Aizawl District

Dimensions Of Career maturity	Male		Female		t value	Significance
	Mean	SD	Mean	SD		
Attitude	32.80	8.29	30.18	8.10	2.767	NS
Competence	30.68	8.10	29.41	8.96	.629	NS
Total Career maturity	62.88	16.72	59.59	15.80	1.753	NS

NS = Not Significant

Table 4.8 reveals the 't' value for the two dimensions of career maturity and also the total career maturity significance of difference between male and female college students of Aizawl District. It is evident from table 4.8 that, there was no significance difference between male and female college students in the two dimensions of career maturity i.e. attitude and competence. The 't' value for attitude is .2.767, 't' value for competency is .629 and 't' valuefor the total career maturityis 0.1.753. Whereas the required't' value, with df = 298 at 0.05 is 1.97 and 0.01 is 2.6. Since, all the calculated't' value of all the dimensions is lower

than the required ‘t’ value, therefore, it can be concluded that there is no significant difference between these two groups of students with regard to their level of career maturity.

Therefore, the null hypothesis that assumes no significant difference between male and female college students of Aizawl District in their career maturity is accepted.

4.5 Objective 5. The fifth objective was to compare the level of creativity with reference to streams of study

In order to find out the level creativitywith reference to streams of study, the following null hypothesis was formulated:

Null hypothesis 3: There is no significant difference in creativity among college students of Aizawl District with reference to streams of study

4.5.1 Objective 5 (a): Level of creativity among college students of Aizawl District with reference to streams of study

This sub section includes level of creativity among college students of Aizawl District with reference to streams of study

In order to find out the level of creativity with reference to streams of study, all the scores were computed, each scores from the three streams were computed separately and analyzed using percentage. Following table 4.9 is the percentage representation of level of creativity with reference to streams of study.

Table 4.9

Level of creativity among college students of Aizawl District with reference to streams of study

Levels of creativity	Streams of study N=300		
	Arts (S1) N = 100	**Commerce (S2) N = 100**	**Science (S3) N = 100**
High	21	55	43
Low	79	45	57

Table 4.9shows the performance of 300 students from the three streams i.e. Arts=100, Commerce=100 and Science=100 on their level of creativity. It is evident from the table 4.9 that out of 100 students at each stream, 21% have high level of creativity and 79% have low level of creativity on Arts, 55% have high level of creativity and 45% have low level of creativity on Commerce, and 43% have high level of creativity and 57% have low level of creativity on Science. Figural representation follows at figure 3:

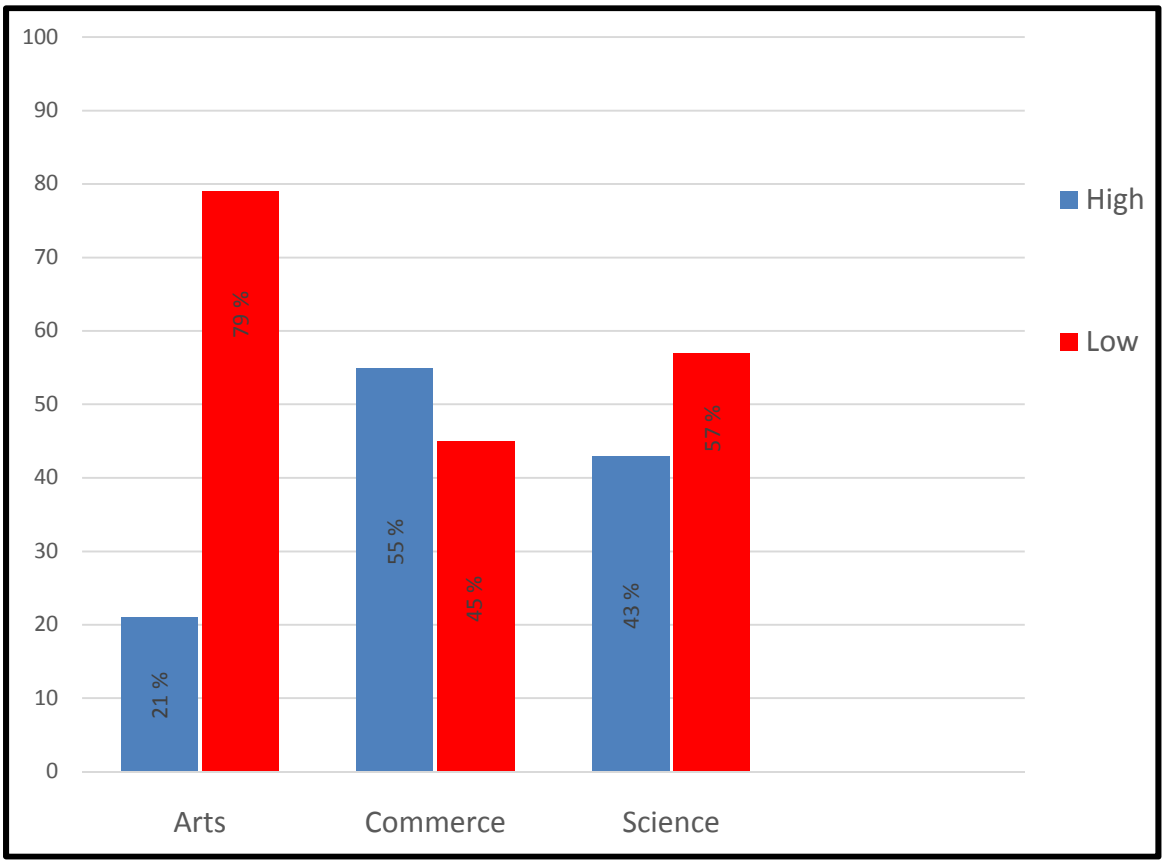

Figure 3: Level of creativity among college students of Aizawl District with reference to streams of study

4.5.2 Objective 5 (b):Comparison of level of creativity among college students of Aizawl District with reference to streams of study

This sub section includes the comparison of level of creativity among college students of Aizawl District with reference to streams of study

In order to find out the significance of difference of creativity among college students of Aizawl District, statistical analysis of ANOVA f-value between respondents of the three streams i.e. Arts, Commerce and Science on the level of career maturity was calculated and analyzed.

Table 4.10

Comparison of level of creativity among college students of Aizawl District with reference to streams of study

Dimensions of creativity	S1(N=100)		S2(N=100)		S3(N=100)		S1 vs S2	S2 vs S3	S3 vs S1	f value
	Mean	SD	Mean	SD	Mean	SD				
Fluency	14.08	7.64	21.20	7.55	24.43	8.05	*	*	*	46.65
Flexibility	11.11	5.84	14.07	5.35	15.72	5.30	*	-	*	18.8
Originality	8.95	6.05	13.68	7.17	15.53	6.14	*	-	*	27.44
Total Creativity	34.14	18.87	48.95	17.49	55.68	16.69	*	*	*	38.72

** Significant at 0.05 level*

Table 4.10 reveals that the'f' value for the significance of difference between the three streams i.e. Arts (S1), Commerce (S2) and Science (S3). Out of the 300 students, there were 100 students at each stream. It is evident that among the three dimensions of creativity, there was no significant difference in flexibility and originality from students of S2 and S3.However, there was significant difference in fluency from all the three streams of study.

Looking at the total creativity from each stream, the mean score of Arts is 34.14, Commerce is 48.95 and Science is 55.68.Whereas the required'f' value, with df = 297 at 0.05 is 3.03 and 0.01 is 4.68. Since, the calculated'f' value is much higher than the required'f' value, therefore, it can be concluded that there is significant difference between these three streams of students with regard to their creativity.

Therefore, the null hypothesis that assumes no significant difference in creativity among college students of Aizawl District with reference to streams of study is rejected.

4.6 Objective 6. The sixth objective was to compare the level of career maturity with reference to streams of study

In order to find out the level of career maturity with reference to streams of study, the following null hypothesis was formulated:

Null hypothesis 4: There is no significant difference in career maturity among college students of Aizawl District with reference to streams of study

4.6.1 Objective 6 (a): Level of career maturityamong college students of Aizawl District with reference to streams of study

This sub section includes level of career maturity among college students of Aizawl District with reference to streams of study

In order to find out the level of career maturity with reference to streams of study, all the scores were computed, each scores from the three streams were computed separately and analyzed using percentage. Following table 4.11 is the percentage representation of comparison of level of career maturity with reference to streams of study.

Table 4.11

Level of career maturity among college students of Aizawl District with reference to streams of study

Range of Score	Interpretation	Streams of study N=300		
		Arts (S1) N = 100	Commerce (S2) N = 100	Science (S3) N = 100
80-120	High	5	14	21
40-79.99	Average	74	80	69
0-39.99	Low	21	6	10

Table 4.11shows the performance of 300 students from the three streams i.e. Arts=100, Commerce=100 and Science=100 on their level of career maturity. It is evident from the table that out of 100 students in each streams, 5% have high level of career maturity, 74% have average level of career maturity and 21% have low level of career maturity on Arts, 14%% have high level of career maturity, 80% have average level of career maturity and 6% have low level of career maturity on Commerce, and 21% have high level of career maturity, 69% have average level of career maturity and 10% have low level of career maturity on Science. Figural representation follows at figure 4;

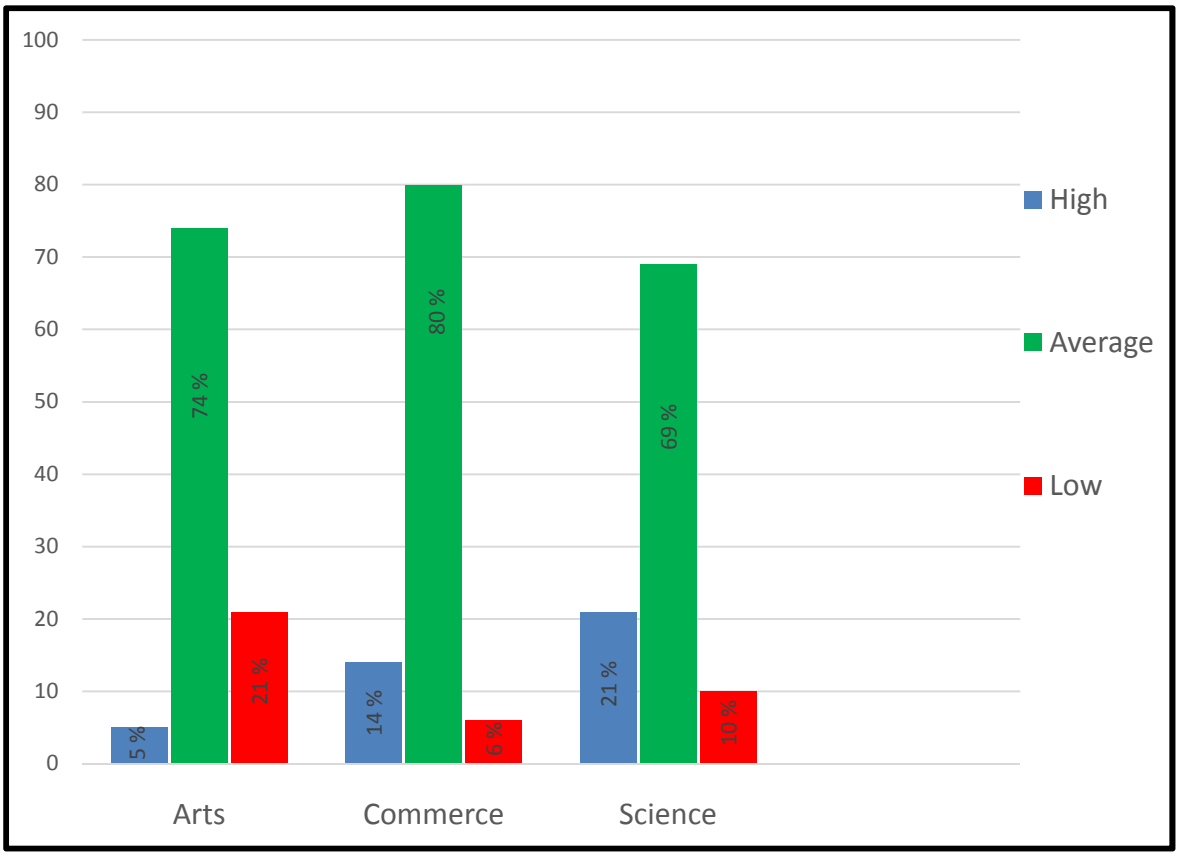

Figure 4: Level of career maturity among college students of Aizawl District with reference to streams of study

4.6.2 Objective 6 (b):Comparison of level of career maturity among college students of Aizawl District with reference to streams of study

This sub section includes the comparison of level of career maturity among college students of Aizawl District with reference to streams of study

In order to find out the significance of difference in career maturity among college students of Aizawl District, statistical analysis of ANOVA f-value between students from the three streams i.e. Arts, Commerce and Science on the level of career maturity was calculated and analyzed.

Table 4.12

Comparison of level of career maturity among college students of Aizawl District with reference to streams of study

Dimensions of career maturity	S1(N=100)		S2(N=100)		S3(N=100)		S1 Vs S2	S2 vs S3	S3 vs S1	f value
	Mean	SD	Mean	SD	Mean	SD				
Attitude	29.89	8.77	32.47	7.25	32.13	8.60	-	-	-	2.944 (NS)
Competence	26.49	7.72	29.77	9.63	32.97	9.26	*	*	-	13.23
Total career maturity	56.36	15.328	62.24	15.794	65.10	16.75	*	-	*	7.789

NS = Not Significant

** Significant at 0.05 level*

Table 4.12 reveals that the'f' value for the significance of difference between the three streams i.e. Arts, Commerce and Science. Out of the 300students, there were 100 students from each stream. And from each stream, it can be seen that between the two dimensions of career maturity, there was no significant difference in attitude from the three streams.

Looking at the total career maturity from each stream, the mean score of Arts is 56.36, Commerce is 62.24 and Science is 65.10. The required‘f’ value, with df=297 at 0.05 is 3.03 and 0.01 is 4.68. Since, the calculated‘f’ value is much higher than the required ‘f’ value, therefore, it can be concluded that there is significant difference between these three streams of students with regard to their creativity.

Therefore, the null hypothesis that assumes no significant difference in career maturity among college students of Aizawl District with reference to streams of study is rejected.

4.7 Objective 7. The seventh objective was to compare the relationship between creativity and career maturity among college students of Aizawl district.

In order to find out the relationship between creativity and career maturity among college students of Aizawl district the following null hypothesis was formulated.

Null hypothesis 5: There is no significant difference between creativity and career maturity among college students of Aizawl District

In order to compare the relationship between creativity and career maturity among college students of Aizawl District, Pearson co-efficient correlation was used to analyzebetween male and female students from the three streams i.e. Arts, Commerce and Science.

Table 4.13

Coefficient correlation between creativity and career maturity among college students of Aizawl District

Variable	Creativity	Career Maturity
Creativity	+1	.298**
Career Maturity		+1

***Correlation is significant at 0.01 level*

**Correlation is significant at 0.05 level*

From the table 4.13, it can be observed that there is positive correlation between creativity and career maturity among college students of Aizawl District. It is also evident that the relationship between the two variable is significant at both the level i.e. (0.01 and 0.05). Hence, the null hypothesis that assumes there is no significant relationship between creativity and career maturity is rejected. Since a positive correlation r=30 is established between these two variable, the analysis explains that there was substantial positive correlation between creativity and career maturity which illustrates that the higher the creativity, the higher the career maturity and vice versa.

CHAPTER V

MAJOR FINDINGS, SUMMARY AND CONCLUSIONS

The present chapter will discuss the major findings of the study, summary, suggestions, conclusions, educational implications and suggestions for further research. In the previous chapter, the data collected was subjected to statistical procedures for analysis and interpretation. In this chapter, various findings reported in the preceding chapter is presented in order to arrive at proper conclusions and generalizations of the present study.

5.1 MAJOR FINDINGS

The data thus obtained has been statistically analyzed and objective wise findings are presented as follows;

5.1.1 Objective 1: To find out the level of creativity among college students of Aizawl District.

It was found that out of 300 students, 181 (60.33%) students' scores were low in their level of creativity. Hence, the college students of Aizawl District have low level of creativity.

5.1.2 Objective 2: To find out the level of career maturity among college students of Aizawl District.

It was found that out of 300 students, 222 (74%) students' scores were average in their level of career maturity. Hence, the college students of Aizawl District have average level of career maturity.

5.1.3 Objective 3: To compare the level of creativity with reference to their gender.

When comparing the level of creativity between male and female college students of Aizawl District, it was found that both male and female have low level of creativity. Therefore, there was no significant difference between male and female college students of Aizawl District in their creativity.

5.1.4 Objective 4: To compare the level of career maturity with reference to their gender.

When comparing the level of career maturity between male and female college students of Aizawl District, it was found that both male and female have an average level of career maturity. Therefore, there was no significant difference between male and female college students of Aizawl District in career maturity.

5.1.5 Objective 5: To compare the level of creativity of college students with reference to their streams of study.

When comparing the level of creativity of college students of Aizawl District with reference to their streams (i.e. Arts, Commerce and Science). 79% students from Arts have low level of creativity, 55% students form Commerce have high level of creativity and 57% from science low level of creativity. It can be indicated that there exist a difference between streams of study. Therefore, there was significant difference in creativity with reference to streams of study. And that among the three streams of study, respondents from commerce have the highest level of creativity.

5.1.6 Objective 6: To compare the level of career maturity of college students with reference to their streams of study.

When comparing the level of career maturity of college students of Aizawl District with reference to their streams (i.e. Arts, Commerce and Science). 74% students from Arts have average level of career maturity, 80% students form Commerce have average level of career maturity and 69% from Science have average level of career maturity. However, there was significant difference in career maturity with reference to streams of study.

5.1.7 Objective 7: To study the relationship of creativity and career maturity level of college students in Aizawl District.

It was found that there exist a positive relationship between creativity and career maturity among college students of Aizawl District. Since a positive correlation is established between these two variable, the analysis explains that there is substantial positive correlation between creativity and career maturity which illustrates that higher the creativity, the higher the career maturity and vice versa.

5.2 SUGGESTIONS

Education plays a key role in fostering creativity and career maturity. The following measures are proposed to foster creativity and career maturity at all levels of education.

- Education remains the biggest impact on employment success of individuals. Students need to be encouraged and supported in completing their education.
- Career counselling programs should be conducted to avoid fallacies regarding choice of subjects.
- Such counselling programs should be aimed at institutional levels as well as communal levels.

- Awareness programs should be conducted for unaware and over ambitious parents.
- Supportive environment should be maintained specifically at the institutional levels for fostering creativity and career maturity.
- Curriculum should be developed based on the needs of the student.

5.3 SUMMARY

Introduction

This study is primarily aimed at finding out the creativity and career maturity level of college students of Aizawl District in relation to their gender and streams of study. The major reason for selecting this area is related to the fact that no such relationship study has been done in this area.

Creativity is the act of turning new and imaginative ideas into reality. It is characterized by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions. It is also called divergent thinking.

Career maturity is conceptualized as an individual's readiness to make well informed, age appropriate career decisions and to shape one's career carefully in the face of existing societal opportunities and constraints.

Age and maturity can bring a new level of passion, ability and insight for creative expression. Although some areas that depend on physical performance, or accumulating and processing vast amounts of information, may become less easy or available as we age, many creative endeavors flourish with increasingly varied life experience and the kind of vitality adult development can nurture.

Rationale of the study

When students enter college level, they entered with a little knowledge of what streams of study should be taken and what will be helpful for their studies in future. Some chose the streams of what their friends or other siblings chooses, some chose because others said it's easy. It is important for teachers as well as parents to know the creative potentials and motivate their child to their most interest areas where that individual can express himself/herself. Therefore, the present study has been selected.

Restatement of the problem

The present study was proposed to find out whether students who have creative talents are vocationally mature in their choice of career. Ultimately, the present study is restated as "Creativity and Career Maturity Among College Students of Aizawl district".

Objectives of the study

1. To find out the level of creativity among college students of Aizawl District.
2. To find out the career maturity level among college students of Aizawl District.
3. To compare the level of creativity with reference to their gender.
4. To compare the career maturity level with reference to their gender.
5. To compare the level of creativity among college students with reference to their streams of study.
6. To compare the career maturity level among college students with reference to their streams of study.

7. To study the relationship of creativity and career maturity level of college students in Aizawl District.

Hypotheses

Based upon the above objectives the following hypotheses were formulated for the investigation.

1. There is no significant difference between male and female college students of Aizawl District in their creativity.

2. There is no significant difference between male and female among college students of Aizawl District in career maturity.

3. There is no significant difference in creativity among college students of Aizawl District with reference to streams of study.

4. There is no significant difference in career maturity among college students of Aizawl District with reference to streams of study.

5. There is no relationship between creativity and career maturity among college students of Aizawl District.

Operational definition

Creativity is the ability or capacity of an individual to create, discover, or produce a new idea or object, including the rearrangement or reshaping of what is already known to him which proves to be a unique personal experience.

Career maturityis the term which denotes the place reached on the continuum of career development from early exploratory years to decline. It is the extent to which an

individual is able to master certain career developmental tasks that are applicable to his/her life stage

Delimitation of the study

The study was delimited only to the Arts, Commerce and Science students from six (6) Degree Colleges of Aizawl District.

Methodology

The methodology and procedure followed by the investigator in the present study is discussed in the following manner.

1. Method of study:The present study is a descriptive research where survey method is employed. It is descriptive because it aims to describe the nature and present status of the phenomenon with the intent of employing data to justify current conditions and practices.

2. Sampling procedure:In the present study, the population is very large and scattered over all the colleges of Aizawl district. The investigator, therefore, has employed the random sampling technique in order to select a representative sample of the entire population. Out of the total 14 colleges in Aizawl District, 6 colleges i.e. Pachhunga University and Zirtiri Residential College (Science), Aizawl North College and J.Thankima College (Arts), Hrangbana College and Govt. Aizawl College (Commerce) has been randomly selected for investigation. Again from each of the 6 selected colleges, 100 students from each streams were then randomly selected.

3. Tools for data collection: The following tools were employed for data collection:

1. Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi(1973).

2. Career Maturity Inventory (Indian adaptation) developed by Dr. NirmalaGupta(1989).

4. Collection of data: To find out the level of creativity and career maturity the above mentioned tools were administered to the students of the selected colleges. The tests were administered in-group setting in a uniform sequence, in order.

5. Sources of data: Primary sources of information were used to find out the creativity and career maturity of college students of Aizawl District.

6. Statistical techniques: The tabulated creativity and career maturity scales were classified in accordance with gender and streams of study. For analyzing the data, the investigator employed the following statistical techniques:

1. Percentage to study the level of distribution of creativity and career maturity scores of different categories of respondents.

2. Frequency distributions to find out the Mean and Standard Deviation of different categories of respondents.

3. 't' Test to find out the significance of difference of different categories of respondents.

4. ANOVA to find out the significance of difference in streams of different categories of respondents.

5. Co-relation to find out the relationship between creativity and career maturity of all the respondents.

7. Interpretation:Interpretation of creativity, was done as per the manual. It was instructed that, scores which are 1SD above the mean should be interpreted as 'high creativity' and scores which are 1SD below the mean should be interpreted as 'low creativity'.

And career maturity was also interpreted as per the manual. Respondents who fall between 0-39.99 were interpreted as having low career maturity, those who fall between 40-

79.99 were interpreted as average career maturity and those who fall between 80-120 were interpreted as having high career maturity.

5.4 EDUCATIONAL IMPLICATIONS

Findings from the analysis respond to the study's research questions and help to achieve its objectives, which are to identify the level of creativity and career maturity. It has implications for students, teachers, parents, administrators and curriculum developer.

- The study of relationship of creativity and career maturity, whether positive or negative, may help parents, teachers, administrators and curriculum developer for taking up necessary punitive steps to foster the students.
- The factors involved in creativity and career maturity are to be identified and necessary guidance and counselling programmes can be taken up to reduce the problems of the students.
- The findings in the study will help the education system develop certain pedagogical models for the all-round development of students.
- The findings will also be helpful for addressing the present burning issues of unemployment among the Mizo youth.
- The study will also help education system in developing a job oriented curriculum.
- If there is any differences on findings, effective measures can be taken up to overcome the differences.

5.5 CONCLUSIONS

It can be concluded from the overall findings that the college students of Aizawl district have a low level of creativity. It also reveals that college students of Aizawl District have average level of career maturity.

In relation to gender, the findings reveal that there was no significant differencebetween male and female college students of Aizawl District in both creativity and career maturity. However, it was found out that the male college students of Aizawl District have a higher mean scores then their female counterpart. This could be due to a complex interplay of biological, developmental and cultural factors. Under Indian cultural set up, the pattern of socialization for male and female is different. In our culture during the child rearing a male student is expected to choose a suitable career for his future whereas for females marriage is expected to be of their primary concern. It is because of the fact that the male displayed greater level than female. In relation to gender, the findings reveal only a slight difference between male and female of college students of Aizawl District.

Students from the three streams of study (i.e. Arts, Commerce and Science) had low level of creativity and average level of career maturity. However, the score of Commerce stream students was the highest in creativity as compared to Science and Arts stream and the score of Science stream students was the highest in career maturity as compared to Arts and Commerce. Students from the Arts stream have the lowest mean scores both in creativity and career maturity in comparison to students of Science and Commerce stream. Hence, there was a significant difference between the three streams of studies. The reason for such differences could be the fact that students who achieved good marks and grades in X^{th} standard usually opt for Science or Commerce and the rest for Arts. Students who have high marks or grades are expected to have high level of creativity.

5.6 SUGGESTIONS FOR FURTHER RESEARCH

On the basis of the study, the investigator has found out that further research can be conducted on the following important areas;

- The same study can be taken up on a larger scale covering the whole district of Mizoram.
- A Comparative study on the same can be conducted at different level of education - post - secondary and post – graduate level.
- A study on the same in relationship to other important factors like emotional intelligence and spiritual intelligence can also be taken up.
- Further research can be taken up in relation to college students' academic achievement, self – efficacy, occupational aspirations and educational interest.
- A study of socio - economic status of college students in relation to their life skills and creativity can also be taken up.
- All the suggested study given above can be taken up for a comparative study between neighboring states of North East India.

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Appendices

Dr. Baqer Mehdi *(New Delhi)*

Consumable Booklet
of
VTCT-M
(English/Hindi Version)

Please fill the following informations (कृपया निम्न सूचनाएँ भरिये)—

Name (नाम) .....

Class (कक्षा) .....

Age (आयु) .....

Sex (लिंग) .....

Father's / Guardian's Name (पिता / अभिभावक का नाम) .....

Occupation (व्यवसाय) .....

Name of Institution (विद्यालय का नाम) .....

Address (पता) .....

Rural / Urban (ग्रामीण / शहरी) .....

Date (दिनांक) .....

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NATIONAL PSYCHOLOGICAL CORPORATION

4/230, KACHERI GHAT, AGRA–282 004 (INDIA)

INSTRUCTIONS

In this booklet you will find mentioned some Interesting problems which will require the use of your thinking ability and imagination to solve them. The purpose is to see how quickly and imaginatively you can think under situations which require novel ways of dealing with them. Read each problem carefully and apply your best thinking in giving the responses. *Write your responses either in English or in your mother tongue*. Responses have to be given briefly but clearly in the space provided under each problem. Give a serial number to each of your responses. There are no right or wrong responses to any of these problems. Therefore use your imagination to think of as many responses as you can.

The problems are divided into *Four Activities*. Each Activity is separately timed. Within the time-limit for each Activity, you may work on the different problems according to our speed. When you finish one problem, go to the next. If necessary, you may return to the previous one again for any addition you would like to make. Remember that you have not to go the next Activity until the time for the first Activity is over and you are told to proceed further.

At the end you will be given 5 minutes extra time, which you may use at any problem of any Activity in which you want to do additional work.

Please do not omit any problem.

निर्देश

जीवन में नवीनता, मौलिकता एवं रचनात्मक योग्यता का बड़ा महत्व है। जीवन की प्रत्येक नई खोज मनुष्य के नये ढ़ंग से सोचने की योग्यता का परिणाम है। संसार की बहुत सी वस्तुएँ हैं जिन्हें नये-नये विचारों द्वारा अनोखा तथा उपयोगी बनाया जा सकता है। ऐसी योग्यता रखने वाले व्यक्तियों ने ही नई-नई खोजें तथा आविष्कार किये हैं। आगे के पृष्ठों पर कुछ ऐसी समस्याएँ दी गई हैं जिन्हें यदि आप विचारात्मक एवं सृजनात्मक ढ़ंग से हल करने का प्रयत्न करेंगे तो आप बहुत से नवीन तथा रोचक उत्तर देने में सफल हो सकेंगे। आपको इन कार्यों के करने में बहुत आनन्द आयेगा।

ये कार्य दिन-प्रतिदिन की समस्याओं से सम्बन्धित हैं; इनका कोई सही या गलत उत्तर नहीं है। देखना यह है कि आप कहाँ तक ऐसी नई एवं अनोखी बातें सोचते हैं जो आपके विचार में आपके साथी नहीं सोच सकते। वास्तव में विचित्र एवं नवीन उत्तर देने से यह पता लग सकेगा कि आप में वस्तुओं को नये ढ़ंग से सोचने की कितनी योग्यता है; अत: जितने भी अधिक नये एवं रोचक विचार आयें लिखते जाइये, चाहे वे असम्भव ही क्यों न मालूम होते हों।

इस परीक्षण में आपको चार प्रकार के कार्य करने के लिये दिये गये हैं। सुविधा के लिये प्रत्येक कार्य का अलग-अलग समय निश्चित है; जहाँ तक सम्भव हो शीघ्रता से उत्तर दीजिये। यदि आप किसी कार्य को निश्चित समय से पहले पूरा कर लेते हैं तो भी जब तक आपसे अगले कार्य के लिये न कहा जाये, आगे न बढ़ें; बल्कि उसी कार्य के बारे में शांतिपूर्वक सोचते रहें और जो भी नया विचार आपके मन में आये, उसे भी लिख दें। अन्त में पाँच मिनट का समय और दिया जायेगा। यदि आपके मन में किसी भी प्रश्न के किसी भाग के बारे में कोई नवीन विचार आया है जिसे आप पहले नहीं लिख पाये थे, तो उसे इस समय में लिख सकते हैं।

प्रत्येक कार्य के हर भाग का उत्तर अवश्य दीजिए, जब आपसे कार्य आरम्भ करने को कहा जाये तो तुरन्त शुरू कर दीजिये।

यदि आपको कोई बात पूछनी हो तो इस समय पूछ लीजिये। यदि इस समय कोई कठिनाई नहीं है और बाद में कोई कठिनाई आये तो शान्तिपूर्वक अपने स्थान से हाथ उठायें ताकि आपकी कठिनाई दूर की जा सके।

ACTIVITY 1 (कार्य 1)

INSTRUCTIONS

On this and the next page, you have been given some situations which will appear to you impossible. You have to think what would happen if such situations actually arise.

Give as many ideas as may come to your mind but try to think as many novel ideas as you possibly can. Ideas which you think no one else might have thought of what would be the best. Write your responses in the space provided for.

You will be given 15 MINUTES for this activity. After every five minutes you will be told the time so that you may move on to the next problem in the activity.

An example has been given which will help you to know what you have to do.

EXAMPLE

Question : What will happen if birds and animals start speaking like man ?

Responses : (i) This world will change into a different kind of society.

(ii) New leaders will emerge from amongst the animals.

(iii) It is possible that a donkey will become our leader.

(iv) It is also possible that he becomes our Prime Minister.

(v) Men may confide their secrets to their animal friends, etc.

निर्देश

इस कार्य में नीचे तीन असम्भव बातें दी गई हैं जो कि कभी सत्य नहीं हो सकतीं। आप केवल यह मान लें कि ऐसा हो गया है। तब आप सोचें कि ऐसा हो जाने पर क्या परिणाम हो सकते हैं ?

प्रश्नों का उत्तर देते समय अपने ध्यान और सोचने की शक्ति को पूरी तरह प्रयोग करने का प्रयत्न कीजिये और 15 मिनट में आप जितने उत्तर दें सकते हैं, दीजिये। ऐसे उत्तर देने का प्रयत्न कीजिये जो आपके विचार में आपके किसी साथी ने न सोचे हों।

उत्तर छोटे-छोटे वाक्यों में देने का प्रयत्न कीजिये ताकि दिये हुये समय में आप अधिक से अधिक लिख सकें।

यदि रखिये आपको 15 मिनट में इस कार्य की तीनों समस्याओं के विषय में लिखना है। जब पहले प्रश्न के विषय में कोई उत्तर समझ में न आये तो आप तुरन्त दूसरे प्रश्न को हल करना शुरू कर दीजिये। अगर बीच में या बाद में पहले प्रश्न के विषय में कोई नया उत्तर ध्यान में आये तो उसे भी पहले उत्तरों के साथ लिख दीजिये। आपकी सुविधा के लिये हर 5 मिनट समाप्त होने पर आपको बता दिया जायेगा।

जब आपसे कार्य आरम्भ करने का कहा जाये तो तुरन्त शुरू कर दीजिये।

नीचे एक उदाहरण दिया जा रहा है जिससे स्पष्ट हो जायेगा कि आपको क्या करना है—

प्रश्न— यदि पशु पक्षी भी मनुष्य के समान बोलने लगें तो क्या होगा ?

उत्तर— (a) यह संसार एक विभिन्न प्रकार का संसार दिखायी देगा।

(b) पशुओं के राज्य में बहुत से नेता उत्पन्न होंगे।

(c) सम्भव है कि एक गधा हमारा नेता हो जाये।

(d) यह भी सम्भव है कि वह हमारा प्रधानमन्त्री बन जाये।

(e) मनुष्य अपने पशु-मित्रों को अपना राजदार (विश्वस्त) बना लें।

(f) पशु भी अपने भेद अपने मनुष्य-मित्रों से कह सकेंगे; आदि।

Problems 1. What will happen if man flies like birds ?
समस्या 1. यदि मनुष्य पक्षियों की भाँति उड़ने लगे तो क्या होगा ?

Answer (उत्तर) –

Problems 2. What will happen if your school is put on wheels ?
समस्या 2. यदि आपके विद्यालय में पहिये लग जायें तो क्या होगा ?

Answer (उत्तर) –

Problems 3. What will happen if man does not require any food to eat ?
समस्या 3. यदि मनुष्य को खाने की आवश्यकता न रहे तो क्या होगा ?

Answer (उत्तर) –

ACTIVITY 2 (कार्य 2)

INSTRUCTIONS

On this and the next page, you have been given names of certain things which could be used in many different ways. You have to think in how many different and new ways the things may be used.

Write as many uses as you can, but to try to think also those which are novel, that is, those which you think no one else might have thought of.

You will be given 12 minutes for this activity. After every four minutes you will be told the time so that you may move on to the next item in the activity.

Below is given an examle which will help you to know what you have to do.

Example : **News-paper**

Uses :
(i) To read the news.
(ii) To make paper Toys.
(iii) To get protection from the sun.
(iv) To wrap something.
(v) To cover a dirty place, etc.

निर्देश

इस कार्य में तीन वस्तुओं के नाम दिये गये हैं जिनको कई नये और विभिन्न तरीकों से प्रयोग किया जा सकता है। आपको इनमें से प्रत्येक के नये-नये, विचित्र तथा रोचक प्रयोग अधिक संख्या में लिखने हैं। प्रयोग साधारण हों या असाधारण, आप सबको लिखिये। यदि आप नये-नये और असाधारण प्रयोग जिन्हें आपके साथ आसानी से नहीं सोच सकते, लिखेंगे तो उससे यह मालूम हो सकेगा कि आप में वस्तुओं को नये ढंग से सोचने की कितनी योग्यता है।

प्रत्येक प्रश्न का उत्तर देना अनिवार्य है।

तीनों वस्तुओं के बारे में लिखने के लिये आपको 12 मिनट का समय दिया जायेगा। जब आप एक वस्तु के प्रयोग लिख चुकें तो तुरन्त दूसरी वस्तु के प्रयोग लिखना आरम्भ कर दीजिये। बीच में या बाद में यदि कोई अन्य नया प्रयोग वस्तु के बार में याद आ जाये तो उसे भी लिख दीजिये उत्तर छोटे-छोटे वाक्यों में लिखिये ताकि आप अधिक से अधिक प्रयोग लिख सकें। हर चार मिनट समाप्त होने पर आपको बता दिया जायेगा।

जब आपसे कार्य आरम्भ करने के लिये कहा जाये तो तुरन्त आरम्भ कर दीजिये।

नीचे दिये उदाहरण में आपकी समझ में आ जायेगा कि आपको क्या करना है—

उदाहरण— **समाचार-पत्र**

प्रयोग—
(a) समाचार पढ़ने के लिये
(b) धूप से बचने के लिये
(c) बच्चों के खेलने की चीजें बनाने के लिये
(d) लपेटने के लिये
(e) रद्दी कागज जमा करने के लिये
(f) गन्दे स्थान को ढकने के लिये; आदि

Problems 1. Piece of stone
समस्या 1. पत्थर का टुकड़ा

Answer (उत्तर) –

Problems 2. Wooden stick
समस्या 2. लकड़ी की एक छड़ी

Answer (उत्तर) –

Problems 3. Water
समस्या 3. पानी

Answer (उत्तर) –

ACTIVITY 3 (कार्य 3)

INSTRUCTIONS

On this and the next page, you have been given pairs of world which can be related to each other in many different ways. You have to think in how many different and new ways are they related.

Write as many relationships as you can, but also try to think those which are novel, that is, those which you think no one else might have thought of.

You will be given 15 minutes for this activity. After every 5 minutes you will be told the time so that you may move on to the next problem in the activity.

Below is given an example which will help you to know what you have to do.

Example : Man and animal

Relationship : (i) Both have life.

(ii) Both need food and water.

(iii) Both can fall ill.

(iv) Both are afraid of enemy.

(v) Both have the experience of feeling cold and hot, etc.

निर्देश

नीचे कुछ शब्दों के जोड़े दिये गये हैं जो आपस में कई प्रकार से सम्बन्धित हो सकते हैं। आपको यह सोचना है कि वे कितने प्रकार से आपस में सम्बन्ध रखते हैं। देखने में तो जोड़े के दोनों शब्द अलग-अलग मालूम होते हैं लेकिन यदि ध्यान से देखा जाये तो नये-नये प्रकार के सम्बन्ध समझ में आ सकते हैं। जितने भी सम्बन्ध आप सोच सकें उन्हें दिये हुये स्थान पर छोटे-छोटे वाक्यों में लिख दीजिये। देखना यह है कि आप कितने अधिक और नवीन सम्बन्ध सोचकर लिख सकते हैं।

आपको इस कार्य के लिये 15 मिनट का समय दिया जायेगा। आपको वस्तुओं के सभी जोड़ों के बारे में विचार लिखने हैं। अत: जहाँ तक सम्भव हो उत्तर शीघ्रता से दीजिये। हर पाँच मिनट समाप्त होने पर आपको बता दिया जायेगा। जब आपसे कार्य आरम्भ करने को कहा जाये तो तुरन्त आरम्भ कर दीजिये।

नीचे दिये उदाहरण में यह बात स्पष्ट हो जायेगी कि आपको क्या करना है—

उदाहरण— आदमी और जानवर

उत्तर— (a) आदमी और जानवर दोनों में जीवन होता है।

(b) दोनों को भोजन-पानी की आवश्यकता होती है।

(c) दोनों को रोग हो सकते हैं।

(d) दोनों को शत्रु का डर रहता है।

(e) दोनों को सर्दी-गर्मी का अनुभव होता है।

(f) दोनों अपने रहने की व्यवस्था करते हैं; आदि।

Problems 1. Tree and House
समस्या 1. पेड़ और मकान

Answer (उत्तर) –

Problems 2. Chair and Ladder
समस्या 2. कुर्सी और सीढ़ी (नसैनी)

Answer (उत्तर) –

Problems 3. Air and Water
समस्या 3. हवा और पानी

Answer (उत्तर) –

ACTIVITY 4 (कार्य 4)

INSTRUCTIONS

Just keep in mind a simple model of a horse. You have to imagine in what ways you can change this simple model into an iteresting and novel one for children to play with. You may think of adding any number of parts or accessories in order to make it really interesting and fascinating for children. Do not bother about the cost of the new parts or accessories that you would like to use in order to make the toy model interesting and fascinating for children.

Write all the ideas which come to your mind in a serial order in the space given below.

You will be given 6 minutes for this activity.

निर्देश

आपने घोड़े का खिलौना तो देखा ही होगा। अन्य जानवरों के भी खिलौने होते हैं जिनसे बच्चे बड़ी प्रसन्नता से खेलते हैं। साधारणतया ये खिलौने छोटे आकार के होते हैं ताकि बच्चे उनसे आसानी से खेल सकें। आप घोड़े के एक सादे खिलौने को ध्यान में रखिये और फिर आगे आप उन अनौखे तथा मनोरंजक तरीकों को लिखिये जिनके द्वारा आप इस खिलौने में ऐसे परिवर्तन ला सकें जिनसे बच्चों को इन खिलौनों से खेलने में अधिक आनन्द आने लगे। इस बात की परवाह मत कीजिये कि इस प्रकार के परिवर्तन पर क्या लागत आयेगी। आपको केवल यह सोचना है कि खिलौने को बच्चों के लिये किस तरह अधिक से अधिक मनोरंजक तथा विचित्र बनाया जा सकता है।

जब आपसे कार्य आरम्भ करने को कहा जाये तो तुरन्त कार्य आरम्भ कर दीजिये। आपको इस कार्य के लिये 6 मिनट का समय दिया जायेगा।

Please Start (आरम्भ कीजिये)

SCORING SHEET OF TCW

ACTIVITY I

Item	Fluency	Flexibility	Originality
1.			
2.			
3.			
Total			

ACTIVITY II

Item	Fluency	Flexibility	Originality
1.			
2.			
3.			
Total			

ACTIVITY III

Item	Fluency	Flexibility	Originality
1.			
2.			
3.			
Total			

ACTIVITY IV

Item	Fluency	Flexibility	Originality
1.			

SCORE SUMMARY

Activity	Fluency	Flexibility	Originality
I			
II			
III			
IV			
Grand Total			

• *See back pege for further instructions regarding originality scoring*

ORIGINALITY SCORING FOR RESPONSES NOT MENTIONED IN THE RESPONSE LIST

For any novel response not mentioned in the response list given in the manual, first of all briefly note it down in the space provided below giving the number of the activity and the item to which it belongs. Then, after you have scored all the test scripts, give it a score according to the scheme given in the manual and note the score in the appropriate column in th Scoring Sheet. In all probability, there will be very few such responses.

Activity	Item	Response	Originality Score
I	1		
	2		
	3		
II	1		
	2		
	3		
III	1		
	2		
	3		
IV	1		

Name :_____

Sex :_____**Age :**_____

Class :_____

Streams :_____

Address :_____

PART 1

KNOWING YOURSELF

INSTRUCTIONS

In each item of this part, you are given a short description of a person. Following the description are four statements about that person. Read the description and then select the statement, if any, that tells what you think about that person, if you have no idea, indicates "don't know".

Mark your answer for this part, In part I of the answer sheet .For every serial number, letters a, b, c, d, e have been given. Put a cross (X) on the letter of the statement which you think is indicative of your opinion on the answer sheet. Make sure that you make only one mark. If you want to change any answer, strike off the earlier answer completely and then make another mark .Reply all questions, do not leave any question answered.

1. **Sheela was involved in a car accident three years ago. She cannot walk now. She has accepted this fact. She goes to school even now in a wheel chair. Shela had planned that when she grew up she would be physical**

education teacher, but now she doesn't know what she is going to do. What do you think?

(a) Since she is handicapped, she should let other take care of her.

(b) There is so little she can look forward to from a wheel chair her future is a dark one.

(c) She has already shown she can overcome here handicap. If she tries hard, she may even be able to walk again.

(d) With her determination and desire, she can hope to find a job which she can do and will like, even with her handicap.

2. **Anjana takes part in number of activities in school such as debate, science club, dramatics, sports, music etc. She is very bright in studies too. She scores higher than anyone else in school examinations. She keeps asking herself which of her interests she should follow. What do you think?**

(a) She should ask her parents for their opinion.

(b) Before she decides which interest to follow, she should be as certain as possible that it is the right one.

(c) She can follow any of her interests since she has enough ability for all of them.

(d) She should give any of her interests because she may take a wrong decision.

(e) Don't know.

3. **Mukesh is a scout and takes part in most of its activities. He enjoy being outdoors and is eagerly looking forward to scout camp being held next month. He loves nature and has good knowledge of the name of trees,**

flowers, birds, etc. He wants to take up a course in forestry science in future. What do you think?

(a) There is no doubt that mukesh has the ability and interest to be a forest officer.

(b) He should discuss his interests with his scout master and do what he suggests.

(c) His interest in nature is probably a temporary one and he shouldn't make plans based on it.

(d) His interest in the area is developing and he should follow it, but with the understanding that it may change later.

(e) Don't know

4. **Nitin play football whenever he can. He has been playing football with his school and neighborhood friends for three years. Now he dreams of being in the school football team one day. He tried to be in the team this year but he was not kept in it. He still play football in school but is not in the school team. What do you think?**

(a) He should try the team again for next year, but should also keep in mind that he may not become a football player.

(b) He should never have tried to enter the school team because then he wouldn't have failed.

(c) He just had a bad year; he may come the team next year.

(d) He should ask his parents whether he really is good at playing football.

(e) Don't know

5. **Reana spends most of her spare time reading novels and poetry. She also writes articles which have been printed in the school magazine. Her Hindi teacher has encouraged her to study Hindi in college and to write poetry and other articles. She wonders if she is really good at it. What do you think?**

   (a) She should ask her friends what they think.

   (b) She can never really be certain that she is good enough.

   (c) Her teacher wouldn't encourage if she was not good enough.

   (d) There is no doubt that she has outstanding talent for it.

   (e) Don't know.

6. **Ravi's house is near the ocean and he loves it. Last year he works in a hotel near the sea and this year he wants to work on fishing boat. He has decided to go into Marchant Navy, as he knows that he will be able to make good money in it, but he does not know whether he will like being at sea for as long as six months or more at a time.**

   (a) He should consult his father about whether he should go in for Navy.

   (b) He seems a born Mariner. He will probably work his way up soon in this field.

   (c) No matter how much more he found out about living at sea, he could not be sure whether he would really like this field or not.

   (d) He should get some more experience and information, He should work in holidays or a steamer for some time and she how he likes it.

   (e) Don't know.

7. **Rita is taking music lessons for several years, mostly because her parents have wanted her to. She has sung in many functions and has been praised**

by her teacher and friends for her performances. Her mother wanted her to study music seriously but she does not like long hours of practice and being alone during them. What do you think?

(a) It is hard to tell if she has talent in music.

(b) She seems to have musical talent but not the interest.

(c) Because she has great talent, it is not really important if she like music or not.

(d) Her parents, friends and teacher are better judges of her ability in music.

(e) Don't know.

8. **Vinod has been delivering milk bottles for last two to three years. During this time he has never been absent or tardy. He is not very bright in studies in school but he feels he is hardworking and dependable. what do you think?**

(a) His record speaks for itself; he is quite dependable.

(b) It is hard to say; He might still miss a delivery or be late.

(c) If his teacher agrees with him then he probably is dependable.

(d) He is not only dependable, but also one of those people who are always on time.

(e) Don't know.

9. **Ruth comes from a large family. Because she is the oldest in the family. She has to help take care of other member, She enjoys it and it is important for her to be a member of a close knit family. She like cooking sewing and interior decoration. She spends most of her free time teaching and playing with younger children at home. She has all the quality of**

good home-maker even though she might also train for career. What do you think?

(a) There is no doubt that she should be a home-maker.

(b) There is no way she can be certain that she could marry or opt for a career.

(c) She should ask her friends what they are going to do and then do the same.

(d) With her interest in home life, she would probably be happy as home-maker, and could have both marriage and a career if she wanted to.

(e) Don't know.

10. **Usha reads almost every movie magazine. She day dreams of being an actress, that one day she would also work in films. She has decided to take up training in acting. She has also tried to take part in school plays, but she has been able to take part in any of them as yet. What do you think?**

(a) She should ask other people what they think of her acting.

(b) Very few people have acting ability, show how can she possibility have any?

(c) Until she has take part in a play, nothing can be said about her acting ability.

(d) She definitely has acting ability: otherwise, she would not be so much interested in acting.

(e) Don't know.

11. **Ramesh enjoys drawing pictures. he is often drawing at home. he has also displays them in the house and has shown them to his friends. His parents praise his pictures but he was disappointed when none of these paintings were chosen for art exhibition school. According to his art teacher, his paintings were not as good as those others.**

(a) His art teacher is the best judge.

(b) He should get more education and training in art try again.

(c) He should rely on his parent's opinion.

(d) All that matters is that he likes to draw.

(e) Don't know.

12. **Satish sometimes feels there is nothing he is very good at. He is average in studies and he is not an athlete. He does not have time to take part in any outside activities at school and home; He works after the school to help support the family. His brother and sister think he is great, but he often worries. What will he do after he has finished his schooling? What do you think?**

(a) With his hard work, he can do anything he wants.

(b) He needs the advice of someone-else to know exactly what kind of person he is.

(c) His willingness to work and concern to others will help him find and hold any job.

(d) If he is now not sure about what he can do in the future, he will be even unsure when he start looking for a job.

(e) Don't know.

13. **Sham likes to do things rather than study them. He is not interested in school and he spends great deal of his time on his hobby---photography. He has now become a good photographer, as picture taken by him turn out to be very good. He realizes that his future is uncertain in this occupation but he think he has the talent to be a good photographer. What do you think?**

(a) Before taking any decision he could consult his friends on this subject.

(b) With the start he has, there is no doubt that his talent in photography to be successful in this field.

(c) It is hard to say that developed enough talent in photography to be successful in this field.

(d) He has developed enough talent to continue in photography until he can decide if he should stay in this field.

(e) Don't know.

14. Rema has tried to become interested in several different things, but she doesn't stay with anything for very long. She will start an activity such as cooking, music or dacing etc. but then quit in a short time. It is hard for her to figure out what she likes to do. What do you think ?

(a) She may just be going through a time of trying different things ; an interest will develop in one of them later on.

(b) It is almost impossible for her to know for sure what her interests are.

(c) She could be interested in anything she wanted to, she could go ahead and get into something.

(d) Her parents know her best; she should ask them what her interests are.

(e) Don't know.

PART 2

KNOWING ABOUT JOBS

INSTRUCTIONS

In each item of this part, you are given a brief description of a job performed by a person. Following the description are four occupational tittles. Read each job description and then select the correct occupational title for it. if you don't find any suitable title indicate "don't know".

Mark answers for this part, In part 2 of the answer sheet .For every serial number,lettersa,b,c,d,e have been given. Put a cross (X) on the letter of the letter of the correct occupational title on the answer sheet. Reply all questions, do not leave any question unanswered. Make only one mark for each item. If you want to change an answer, strike off the earlier answer completely and then put another mark.

15. **Reena was lost in old memories and thought of her beginning years when she had started her lessons. Everybody made fun of her. today she was waiting for her first show to start. This show would run for a few weeks. Her part in each was not very large but if she could make an impression it might lead to a bigger part next time. She had worked very hard to get this far-she had to put many hours of hard work each day. her parents had also spent a lot of money educating her for this.**

    (a) Commercial artist.

    (b) Dancer.

    (c) Physio-Therapist.

    (d) Magician.

(e) Don’t know.

16. **Ram watch carefully as the machine ran at top speed. Suddenly he pushed a bottom and stop the machine as one roll of paper feeding into the roller was tearing away. He repaired it and also checked the ink tanks and filled those that were running low. He start the machine again and finished the first part of his work. With new plates in place for the remaining parts, he once again started the machine and finished the job. What is Ram’s occupation?**

(a) Laboratory technician.

(b) Office machine operator.

(c) Tool and die maker.

(d) Printer.

(e) Don’t know.

17. **Sushil carefully place the iron on the surface of the drilling machine. He again checked to see whether he was drilling the hole as per instructions and measurements. He then lowered until it started to spin through the metal. When he finished, he again measured the hole and kept it with the other pieces. This was the last piece in this job; after lunch he will assemble all the piece into a definite shape. What is Sushiloccupation ?**

(a) Optician.

(b) Instrument mechanic.

(c) Mechanist.

(d) X-ray technician.

(e) Don’t know.

18. **Sudha smiled and handed Mrs. Verma four packages of ten rupees notes, two packages of five rupees notes ,and six one rupee coins. Mrs.Verma counted the notes collected the coins and kept them in her purse carefully. Sudha notice that there was no one else on the window, so she counted the notes and coins in the drawer as she would need to balance her cash at the end of the day. What is Sudha occupation?**

    (a) Accountant.

    (b) Bank cashier.

    (c) Purchasing agent

    (d) Canvasser representatives.

    (e) Don't know.

19. **Vinod set the camera so that it was pointed at the man's chest. He checked to see whether the person was at the correct distance and angle. After that, he went behind the lead wall and asked the person to hold his breath for a few second while he pushes a button to start the machine. Now he only had to develop the film. What is Vinod's occupation?**

    (a) Machine tool operator.

    (b) Optometrist.

    (c) Photographer.

    (d) X-ray technician.

    (e) Don't know.

20. **Deendayal saw the map the house and started measuring with the tape. He adjusted the door frames with the walls and started fixing the nails. He also had still to fix door frames and cupboards for the other rooms. What is deendayal's occupation?**

(a) Draughtsman.

(b) Carpenter.

(c) Interior decorator.

(d) Mason.

(e) Don't know.

21. Mohan locked carefully at the long list of numbers on his desk an wondered where he had made the mistake. He could not make the credit and debits come out even. As he started to add them again, the peon came to inform him that somebody was in the office waiting to see him. It was Shri madanlal,a cloth merchant from chhandaniChowk, who wanted to get his account checked. During the day he talked with other clients about their financial matters and prepared an account of their income and expenditure. What is Mohan's Occupation?

(a) Chartered Accountant.

(b) Book-keeper.

(c) Lawyer.

(d) Statistician.

(e) Don't know.

22. Rekha works for welfare centre, where she help people in many ways such as solving problems related to personal adjustment, money and jobs. She prepares a case history and presents its facts, at meetings. She arrange to provide for other facilities also ,such as child care, health service and legal advice. What is Rekha's occupation?

(a) Doctor.

(b) Public relation officer

(c) Recreation worker.

(d) Social worker.

(e) Don't know.

23. Sushila is busy these days because she has been given a big order for new summer fashions by a big readymade garments factory. She has to do this work very soon so that she could get them ready for sale before the season. she also had to go to Bombay for this work so that she could bring latest designs from there. What is Sushila's occupation?

(a) Dress designer.

(b) Advertising copy writer.

(c) Public relation officer

(d) Buyer.

(e) Don't know.

24. Mahendra had to work very fast because there was lot of crowed in the Restaurant. He had just prepared and given one set coffee and two omeletts. He had received three more order for lunch one of which for today's special malai-kofta and muttor-paneer, the second potato cutlets and the third for one set tea. He quickly started preparing each of these so that he could have them ready before new orders came in. What is Mahendra'soccupation ?

(a) Cook.

(b) Waiter.

(c) Dietician

(d) Vendor.

(e) Don't know.

25. **Sushma can talk easily and make a good impression on people, as she cuts, washes and brushes their hair. She had good knowledge of new hairstyles and of new fashion. Sometimes she can also give manicures, messages and can also tell about skin diseases.**

    (a) Beautician.

    (b) Fashion designer

    (c) Receptionist.

    (d) House worker.

    (e) Don't know.

26. **Jogjinder was waiting for loaders to finish loading, as he wanted to be on the road again. He always enjoys being on the move even if it were to place he had been before. This trip however, was to Bombay, where he had never been before now he was ready to go. He made a last minute check with the office about his route and time of arrival. Within a few minutes he was on his way. What is joginder 's occupations ?**

    (a) Bus conductor.

    (b) Travel agent

    (c) Loader.

    (d) Truck driver.

    (e) Don't know.

27. **Shashiscaned the menu once more, before sending it to the kitchen for the next day's meals. She had taken care to see that the food was both good tasting and nutritious. She also had to take care of the cost as things were expensive and she had to work on a fairly light budget. She tried to use leftover but there was always waste as food had to be prepared for**

hundred of people. She made use of her training to statisfy,the people as much as possible. What is Shashi'soccupation ?

(a) Chemist.

(b) Cook.

(c) Dietician.

(d) Food technologist.

(e) Don't know

28. Pramod sat comfortably in his chair and listened carefully as a Vimla sitting across him told how she had tried to make a success of her marriage and how her in-laws had troubled her for a dowry. But fed up, she had now come to her permanent home and wanted to file for a divorce. Pramod explained to her the divorce laws and asked her if she want to go through with it. When she says yes,hesarted to gather all the information and got some forms filled. What is pramodoccupation ?

(a) Lawyer.

(b) Marriage counselor.

(c) Writer.

(d) Psychiatrists.

(e) Don't know.

PART 3

CHOOSING A JOB

INSTRUCTIONS

In each item of this part, you are given a short description of a person. Following the description are four occupational tittles. Read the description each person and then select the occupation you think is the best one for that person. In other words, which one of the occupations do you think the person would be happiest an most successful in ?you can't decide, indicate "don't know".

Mark your answer for this part, In part 3 of the answer sheet .For every serial number ,lettersa,b,c,d,e have been given. Put a cross (X) on the letter of the correct occupational title in the answer sheet. Do not begin the next part until you are told to do so. Make only one mark for each item.

29. **Suresh has been contributing to school magazine for the past three years. He write the daily spot news on the display board. Now he is keen to know, how a news paper is printed. He has also worked in a press near his house for a few days and learned many things about news paper such as, how page are set, and how the press is run. which one of the following occupations would be the best for suresh ?**
    (a) Copy writer.
    (b) Printer.
    (c) News correspondent.
    (d) X-ray technician.
    (e) Don't know
30. **Shohan takes part in every debates in his school. Some of his articles have been printed in the school magazine. He has the ability to express his ideas in clear-cut's and beautiful words. he is impressive in his arguments and can win people to his point of viewed. He gets good marks in school**

examinations too. When one of the following occupations would be the best for Sohan ?

(a) Psychologist.

(b) Journalist.

(c) Insurance agent

(d) Lawyer.

(e) Don't know.

31. **Rachna has been taking part in the debating competitions for two years. Once she was sent to an orphanage from school an took there some food and clothes etc. She was very much taken-in by children there. She like working with people. She has been president of the school student committee. She gets good marks in all subjects especially in social sciences. She wants to study the subject in college too. which one of the following occupations would be the best for Rachna ?**

(a) Journalist.

(b) Teacher

(c) Psychiatrists.

(d) Social worker.

(e) Don't know.

32. **Suraj is studying commerce subjects after tenth.After his schooling he wants to work.He gets good marks in studies especially in book-keeping.in his spare time after school,he has often sold tickets for school fair and other functions.He liked this work a great deal and carried it out responsibility. which one of the following occupations would be the best for Suraj ?**

(a) Bank teller.

(b) Statistician.

(c) Telephone operator

(d) Salesman.

(e) Don't know.

33. Sheela likes to work with numbers a lot. In maths, she is one of the best students in her class. In the school cultural functions, she is the one who keeps an account of money matters. In the opinion of her teachers she can be successful in the field of commerce. Which one of the following occupation would be the best for Sheela ?

(a) Accountant.

(b) Engineer

(c) Canvasser representative.

(d) Book-keeper.

(e) Don't know.

34. Ravi is interested in cooking; especially he is interested in preparing new dishes. He has learn to cook many things at home and has offered them to guests. He has decided to take up such training after class XII which would help him get a job in a restaurant or a hotel. Which one of the following occupation would be the best for Ravi ?

(a) head cook.

(b) Dietician.

(c) Restaurant owner.

(d) Home science.

(e) Don't know

35. **Rama takes a lot of interest in every activity at home. She is very much interested in gardening, flower arragement,and keeping things clean and well-arrangement. She sews and has made many off her own clothes.Last summer, she took two months training in flower arrangement. Which one of the following occupation would be the best for Rama?**

    (a) Dress designer.

    (b) Purchasing agent.

    (c) Interior decorator

    (d) Horticulturist.

    (e) Don't know.

36. **Shyam has a lot of friends in class.He can get around with all his class-mates very soon.When he is by himself,he read detective stories.He also enjoys seeing mystery flims.Thought he is not very good in studies but he is hardworking and dependable. He has also been a member of 'saftey petrol' in his locality's youths club. He also takes part in hockey and athletics in school. Which one of the following occupation would be the best for Shyam ?**

    (a) Sportsman

    (b) Forest Officer.

    (c) Police officer.

    (d) Social worker.

    (e) Don't know.

37. **Ram is a hard working boy.He stay mostly by himself rather than talking with others in school or taking part in games and sports.He goes home straight from school and either reads science articles or fictions or build**

model airplanes. In class he is one of the best students in maths and physics. Whcih one of the following occupation would be the best for Ram ?

(a) Engineer.

(b) Librarian.

(c) Mechanist.

(d) Insurance agent.

(e) Don't know.

38. Virender has entered B.Sc. He is very much interested in science. He has been getting very good marks in chemistry, biology physics and maths. He is hard working and can study for long hours at a stretch. He was the member of the science and health club in school. He is also popular amongst his friends. Which one of the following occupation would be best for Virendra ?

(a) Architect.

(b) Instrument mechanic.

(c) Doctor.

(d) X-ray technician.

(e) Don't know.

39. Satyendra has an impressive personality. He has a good style of talking. He dresses up well as his clothes are clean and nice. He mixed up quickly with everyone. He has often going around selling magazines, Diwali an New year cards and lottery tickets in big qualities. He seems to make a good impression on other by his way of talking. Which one of the following occupation would be best for Satyendra ?

(a) Architect.

(b) Bank cashier.

(c) Insurance agent.

(d) Journalist.

(e) Don't know.

40. Seeta wants to go for college education after school. n addition to her school studies, she like reading books. She is eldest at home and therefore to help younger brothers and sisters in their school homework. She like meeting and talking with others. She has many friends in school. Because she is an intelligent girl she helps other students in her class. Which one of the following occupation would be best for Seeta ?

(a) Sales girl.

(b) Writer

(c) Teacher.

(d) Social worker.

(e) Don't know.

41. Ruchika is not very good in studies. After her schooling she wants to take up a job after doing some commercial course from a polytechnic. She would like to find a job that is inside and office, clean and with chances to move up. She is quick with her hands and fingers. She also likes mixing around with people. Which one of the following occupation would be the best for Ruchika?

(a) Receptionist.

(b) Medical Technologist.

(c) Computer programmer.

(d) Stenographer.

(e) Don't know.

42. Shanti comes of a big family. Not having a mother ,she has to look after children at home and take care of the old grandfather. She is interested in this work. She understands her family's financial difficulties and very soon wants to take up a training so that she can enter into a job where she can help others. Which one of the following occupation would be the best for Shanti ?

(a) Nurse.

(b) Social worker.

(c) Doctor

(d) Psychologist.

(e) Don't know.

PART 4

LOOKING AHEAD

INSTRUCTIONS

In each item of this part, you are given an occupational title. Below it were given three steps that a person could complete, t o prepare for and enter this occupation. You are the given four ways in which this steps could be ordered. Read every occupational title and steps and then select the correct order for completing the three steps. If you can't decide indicate "don't know".

Mark your answers for this part, In part 4 of the answer sheet. Against every serial number, letters a,b,c,d,e have been given. Put a cross (X) on the letter for the correct order of the steps in the answer sheet. Reply all questions, do not leave any question unanswered. Make only one mark for each item. If you want to change an answer, strike off the earlier answer and make another mark. You have to make only one mark for each item.

43. Pankaj wants to be printer. three steps he can take to become one are :

1. Appear for selection test to get a job of the printer.
2. Obtain practical training as an apprentice under a printer.
3. Join an institution to obtain education and training as a printer.

What is the correct order of these steps ?

A. 1 2 3

B. 2 1 3

C. 3 1 2

D. 3 2 1

E. Don't know.

44. Shobha wants to be a beautician. Three steps she can take to become one are :

1. Find a job as a beautician.
2. Obtain practical training as beautician from a beauty clinic.
3. Enter an institution to qualify as beautician.

What is correct order of these steps ?

A. 1 2 3

B. 2 3 1

C. 3 1 2

D. 3 2 1

E. Don't know.

45. Jitender wants to be an air conditioning and refrigeration mechanic. Three steps he can take to become one are :

1. Train as an air conditioning and refrigeration mechanic from an industrial training institute.
2. Pass class X with science subjects.
3. Gain practical experience as an apprentice.

What is the correct order of these steps ?

A. 1 2 3

B. 2 1 3

C. 2 3 1

D. 3 1 2

E. Don't know.

46. Ranjit wants to be Horticulturist. Three steps he can take to become one are :

1. Look for a job an horticulturist in a Govt. or private organization.
2. Obtain graduation in agriculture.
3. Do post graduation in agriculture.

What is the correct order of these steps ?

A. 1 3 2

B. 2 1 3

C. 2 3 1

D. 3 2 1

E. Don’t know.

47. Pratibha wants to be lawyer. Three steps he can take to become one are :

1. Get the license from the bar council.
2. Get a degree in law.
3. Study up to graduation from a university.

What is the correct order of these steps ?

A. 1 2 3

B. 2 3 1

C. 3 1 2

D. 3 2 1

E. Don’t know.

48. Laxman wants to be a mechanist. Three steps he can take to become one are :

1. Get a job Mechanist.
2. Appear for selection test to be an apprentice.
3. Gain practical experience in a factory as an apprentice.

What is the correct order of these steps?

A. 1 2 3

B. 2 3 1

C. 3 1 2

D. 3 2 1

E. Don’t know.

49. Harsh wants to be a Stenographer. Three steps he can take to become one are :

1. Enter into commercial institution.
2. Appear for typing and stenography exam.
3. Go through newspaper advertisements a job.

What is the correct order of these steps ?

A. 1 2 3

B. 1 3 2

C. 2 1 3

D. 3 2 1

E. Don't know.

50. Nitin wants to be a veterinary surgeon. Three steps he can take to become one are :

1. Take a degree in Veterinary science.
2. Appear for an U.P.S exam.
3. Pass class XII with science subjects.

What is the correct order of these steps ?

A. 1 3 2

B. 2 1 3

C. 3 2 1

D. 3 1 2

E. Don't know.

51. Hari wants to be an architect. Three steps he can take to become one are :

1. Get education and training in architecture.
2. Get license to private practice.
3. Gain practical experience by working with an architect.

What is the correct order of these steps ?

A. 1 3 2

B. 1 2 3

C. 3 1 2

D. 2 3 1

E. Don't know.

52. Pawan wants to be a hotel manager. Three steps he can take to become one are :

1. See newspaper advertisements for job.
2. Get practical training in a hotel.
3. Obtain a diploma in hotel management.

What is the correct order of these steps ?

A. 1 2 3

B. 2 3 1

C. 3 1 2

D. 3 2 1

E. Don't know.

53. Poonam wants to be a commercial artist. Three steps she can take to become one are :

1. Apply for a job.
2. Work with an experienced commercial artist.
3. Obtain a diploma in commercial art.

What is the correct order of these steps ?

A. 3 2 1

B. 2 3 1

C. 3 1 2

D. 1 2 3

E. Don’t know.

54. Chaman wants to be a bus driver. Three steps he can take to become one are :

1. Become a bus driver in a bus service company.
2. Learn driving a bus.
3. Give test to obtain a license as bus driver.

What is the correct order of these steps ?

A. 1 3 2

B. 2 1 3

C. 2 3 1

D. 3 2 1

E. Don’t know.

55. Mukhul wants to be an X-ray technician. Three steps he can take to become one are :

1. Obtain training as an X-ray technician.
2. Pass X-ray technician examination.
3. Look for a job in a hospital or a clinic.

What is the correct order of these steps ?

A. 3 2 1

B. 1 3 2

C. 2 1 3

D. 1 2 3

E. Don't know.

56. Abha wants to be a dancer. Three steps she can take to become one are :

1. Go to a dancing school.
2. Take part in dance performances on stage.
3. Learn different forms of dance and then specialize.

What is the correct order of these steps ?

A. 1 3 2

B. 2 3 1

C. 3 1 2

D. 1 2 3

E. Don't know.

PART 5

WHAT SHOULD THEY DO ?

INSTRUCTIONS

In each item of this part, you are given a short description of a problem that a person his having in school or in choosing a career. Following the description are several solutions to each problem. Read the description and then select the solution you think would be the best one for that individual. If you have no idea, indicate "don't know".

Give your answer to this part, In part 5 of the answer sheet .For every serial number, letters a,b,c,d,e have been given. Put a cross (X) on the letter of the correct answer sheet. Make sure that you put only one mark for each item. Reply all question,

don't leave any question unanswered. If you complete work on this part before the time is called, you may go back and revise questions done earlier.

DO NOT PUT ANY STRAY MARKS ON THIS BOOKLET.

GIVE ALL ANSWERS ON THE ANSWER SHEET.

57. Shyam's father wants Shyam to be a doctor but shyam is more interested in business as a career. What should he do?

(a) He should be a doctor.

(b) Combine business and medicine; be a hospital administrator.

(c) Try to change his father mind.

(d) Ask a friend what to do.

(e) Don't know.

58. Kamal wants to be a success in life and to be satisfied in his work. But, he cannot decide on an occupation. What should he do ?

(a) He should consult his teacher or the school counselor.

(b) He should try out different occupations.

(c) Not think about it.

(d) Postpone the decision until something comes along.

(e) Don't know.

59. Navin is an intelligent student. He gets very good marks in studies. He has obtained a scholarship for further studies. But even with a scholarship would not be able to manage his expenditure in studies because a financial hardship. What should he do ?

(a) He should take up a job.

(b) He should take a loan from somewhere.

(c) Go to college which costs less money.

(d) Work part time and go to college part time.

(e) Don't know.

60. Arvind wants to make classical music his profession, but his parents are opposed to it. What should he do ?

(a) He should enter music school against his parents' wishes.

(b) He should talk it over with his parents.

(c) He should choose another occupation for himself.

(d) To satisfy his interest, he should learn music only in his spare time.

(e) Don't know.

61. Praveen wants to be an airline pilot.But in a physical examination he found out that his eye sight is poor. What should he do ?

(a) He should consult his teacher or school counselor.

(b) Find another job in aviation.

(c) Do exercises to improve his eye sight.

(d) Keep taking eye tests until he passes it.

(e) Don't know.

62. Ranjit wants to be trained as a motor mechanic from a industrial training institute.But,he came to know for newspaper advertisement that he has missed the last date for giving application in the institution. What should he do ?

(a) Choose another occupation.

(b) Learn himself the work of motor mechanic.

(c) Assume what he read in the paper was wrong.

(d) He should ask a trained mechanic how else he can obtain this training.

(e) Don't know

63. Meera dreams of becoming an actress. twice, she has had the lead in school plays. But she does not have the self-confidence it would take to be successful actress. What should she do?

(a) She should give up acting and try something else.

(b) Convince herself that she really can act.

(c) Try to figured out why she lacks self-confidence.

(d) Get more experience in acting; self-confidence will come.

(e) Don't know.

64. Bina wants to take training in library science and be a librarian. But she does not know how to go about it. What should she do?

(a) Change to occupation she knows about.

(b) Get a college degree first, when worry about being a librarian.

(c) Get a job in a library first and then work her way up to be a librarian.

(d) Talk with some librarian about how to get trained for it.

(e) Don't know.

65. Meena sings very well and wants to be a singer. But she wonder if she could become one when she grow up. What should she do ?

(a) Get opinion from a successful singer.

(b) Develop greater determination to achieve success

(c) Change to another occupation; as she would have to face though competition in this field.

(d) Get another job and sing part time until she can tell if she will be a success.

(e) Don't know

66. Samir wants to be a traveling salesman and earn a lot of money. But he does not like to travel too much. What should he do ?

(a) Choose some other occupation

(b) Start his own business and has someone else do the traveling.

(c) Be a salesman and travel for a while until he makes some money; then may be he will become a sales manager.

(d) Settles for less money. In a sales job where he would not have to travel ; as a salesman in a shop.

(e) Don't know.

67. Vineet is intelligent and has the ability to go in for higher education. He can be successful in higher level occupation but he does not wants to study further and wants to get a job after class XII. What should he do ?

(a) Get a job and forget about further education.

(b) He should first obtain college education and then think of a job.

(c) Go to college part time and work part time.

(d) He should force himself to go to college he would be glad he did later.

(e) Don't know

68. Jyoti always stand first in her class .But she does not have strong interest in any occupation. What should she do ?

(a) She should take up any occupation.

(b) Try several occupations and see what interest her.

(c) Try several occupations and see what interested her.

(d) Should hold on studying; she will get interested in something.

(e) Try to know her interests clearly by taking psychological tests and by talking with a counselor.

(f) Don't know.

69. Gautam is very good in studies and is a good football player. He wants to be an architect and at the same time wants to keep up with his interest in football. But the support scholarship that he has obtained is from a college, which will enable him to sustain his interest in football but has no facility for training as an architect. What should he do ?

(a) Try for an academic scholarship at a college which has facility for both architecture and playing football.

(b) Give up either football or architecture

(c) Play football ; then study architecture from a different institution.

(d) Forget about both and get a job.

(e) Don't know.

70. Madan wants to open his own electrical appliances shop when he finishes electricians training. But he does have enough money to do so ? What should he do ?

(a) Go into another occupation.

(b) Get a loan from the bank.

(c) Get a job in some other electrician's shop.

(d) Wait till he earns enough money to open his own shop.

(e) Don't know.

Activity No.	Item No.	Category Alphabet serial	Category	Responses	Originality weight
1	2	3	4	5	6
I	1	A	Social and cultural consequence	No conflict New leader New society Cultural change Rules and regulations	 5 5 3
		B	Transport and travel	No roads No vechicle No airlines Ease in travel	4
		C	Environment	Less polution Good environment	1 2
		D	Living habits	Independent Easy lifestyle More freedom More enjoyment Search for own food	 4 4

		E	Business	Less employment opportunity	3
		F	Man-bird relationship	Killing od birds Extinction of birds Friendship between man and birds	5 4 3
		G	Biological changes	Wings	5
		H	Legal and administration implication	Choas More crime Requires banned hunting birds	4 3 4
		I	Traffic	No traffic Requires air traffic	2 3
		J	Economic	No fuel Save money Less expense Economic change Economic growth Save mineral/natural resource	2 4 4
		K	Superficial consequences	Magic Shift to another planet	5 5
		L	Location	Save time Requires compass	3 5

				No proper settlement	3
		M	Health	Less fit Less walking Man will be light weight	5 5 5
		N	Sports and games	New games Play in clouds	3 5
		O	advancement	New invention advance technology	4 4
		P	Other	More illeterate Dominate birds Different mindset Less global warming Easy to rebuild our city	4 5 5 5 5
	2	**A**	Educational Implication	Improved activity Higher literacy Spread education Defficulty in study More effective in teaching learning Different Studying method	5 2 4 3
		B	Problems of Location	No permanent settlement	
		C	Traffic	Accidents	1

				Required broad road	2
		D	Inconveniensces and habits	Chaos More danger	4 3
		E	Psychological effects	Lack of cocentration Interest in learning Distraction from outside	3 4 4
		F	Social consequences	Change in society Can post a threat for community Different environmental changes	3 3 4
		G	Economic Implications	Requie fuel Require engine No bus fare Less expenditure	3 3 3
		H	Advantages	More secure Save from earthquake Attracting Students No walking to school Easier for rural area School will pickup students Easier reaching school	 4 2 4 4

		I	Effect on school building	Shaky building Problem in parking Requires spare parts	4 5 4
		J	Amusement	More fun More view	4 4
		K	Transportation	Require driver No school bus Excursion every day Easy transportation Travel for study tour	3 5 3 3 4
		L	Living habits	Changes of lifestyle Leads to laziness	4
		M	Health	Motion sickness Physical problem for student	2 2
		N	Games and sports	No outdoor games School racing competition	5 5
	3	**A**	Social consequence	Reduction of gap between rich and poor No starvatio No proverty	5 3
		B	Morals and regulation	Only aim for leadership & luxury	5

		C	Biologgy and physique	Lazy	
				No fat	5
				Shorter life	2
				save time	3
				No sickness	3
				No dieting	
				No growth	4
				Thick skin	2
				No strenght	5
				Save energy	
				No health issue	5
				No digestive system	1
				Loss of tastebuds	4
				man become more	5
				robotic	4
				Skin colour might change	5
				Man be more like plasticks	5
		D	Economy and occupation	Independent	5
				save money	
				Occupation problem	1
				Ecological Imbalance	2
				Less wastages	5
				More resources	5
				Negligence on tree	

				plantation No food factory Changes in marketing system No need for earning/work	4 5
		E	Sanitation	No need for toilet	0
		F	Amusement and recreation	Easy survival Improve talent More worth of living	4 5 4
		G	Psychological Implication	More useless being Cannot develop their skill Less depression Less exitement Economic change	3 5 5 5 3
		H	Miscellaneous responses	No fishing No ration Fewer needs No killing of animal for food Problem in food chain world become unsafe	5 5 5 5 5 4
		I	Advancement	Improve technology	4
		J	Animals & plans	More plants / trees	2

				Less deforestation	4
				Lots of animals	3
				No endengered species	5
				Lots of fruits	5
II	1	**A**	Games and Play	For throwing For playing For slingshot	 3 5
		B	Instrumental use	for calculating days	5
		C	Anti-social use	For cracking glass For hunting	5 5
		D	Building purpose	For building house For building wall For makin roads Plugging holes To make a pillar	2 2 2 4 4
		E	Defensive use	For protection Use as a weapon	4 4
		F	Decoration	For fencing For painting For monuments For soviniers For tombstone For creating statue For keeping in aquarium	 3 3 5 4 4 3

				For designing artificial Landscape	3
		G	Weights	For measurements	3
		H	Writing Use	For writing	4
		I	Support	For support	4
		J	Scientific use	To make fire To filter Water	4 2
		K	Other	For traps Cannot talk Cracking nuts	
	2	**A**	Self defence	For protetion	4
		B	Anti-social	Use as weapon	1
		C	As an accessory	For making toys For making pencil For making match-boxes For making stick For making drum-stick For decoration For making tooth pick For making grib for knife	 3 4 3 3 5
		D	Support	To support walking	2

		E	Games and sports	For Making cricket bat For Making hockey stick For making bow and arrow	6 5 3
		F	Measurement	For Measuring For making compass	2
		G	Miscelleneous responses	For fire For punishment It is solid For earning money	
		H	Furniture	For furniture For fencing wall For making tablets For making ladder For making hammer For making chairs	2 2 4 3
	3	**A**	Living	For life Dringking Life for aquatic animal	5
		B	Cleaning purpose	Bathing Washing	
		C	Play and Fun	For playing For working up a person	3 5
		D	Industrial uses	For producing hydro-	

				electricity	
				To make water engine	4
				For agricultural purposes	4
				For medical purposes	
		E	Everyday use	Cooking	
		F	Miscellaneous uses	Fishing	5
				Swimming	1
				For windmill	
				For Baptisma	
				For putting out fire	5
II	1	**A**	Commoness in physical Characteristics	Require wide space	
				Both are solid	5
				Both are stable	4
				Can be burned	5
				Provide shade	
				Both are tall	
				Have wood content	4
				Require good foundation	
				Require soil for foundation	4
				Can be broken dow	
		B	Shelter - 1	Home for bath	
				Protection for weather	3
				Protection for landslide	4

				Protection for crime	4
		C		Tree house Need to be taken care of Experience hot and cold Can be affected by storm	 4 5 4
	2	**A**	Commoness in physical Characteristics	No life Man made Can not move Both are solid Can be burn Can be broken Both are artificial	 2 5 5 4
		B	Miscellaneous	Forworking For reaching Tool for gymnastics Necessities at church and hall	1 4 5
		C	Support	For Support For relaxation Necessities at home	3 1 2
		D	Furniture	Made from wood Made from steel Made from plastic Made for metal	 2 2 4

	3	**A**	Essential for life	Source of life Natural resources Both are renewable Both are transparent	 1 5
		B	Commoness in chemical properties	Can be poluted No /shape figure Both are abiotic Both are lequid	4 5
		C	Miscellaneous	No life No feeling Uncountable Generate electricity Can not be caught with bare hands Creates beautiful scenery Freely consume	5 5 4 4 5 5 5
	4	**A**	Mechanical arragement	Cart type Controllable Use battery	4 3 4
		B	Construction	Rubber Wood Metal	4 4 4
		C	Decoration	Wears crown Earings Wears nailpolice	5 4 4

				Wears sunglass	5
		D	Body parts	Fat	3
				Thin	3
				Horn	2
				Small	3
				Short	3
				No tail	5
				Curly hair	4
				Sharp wings	4
				Six legs	5
				Small head	4
				Green eye	5
				All parts removable	4
		E	Adding new things	Rock chair	4
				Unicorn	4
				Golden Shoe	4
				Have power	5
				Curly hair	5
				Able to breathe under water	
		F	Motion arrangement	Have feelings	3
				Can sing	3
				Can talk	2
				Fast	1

				Can fly	2
				Can cry	4
				Can spit chocolate	5
				Can bow down	5
				Pink	4
				Blue	4
				Black	4
		G	Colour	White	5
				Brown	5
				Purple	5
				Multi colour	3

I. INTRODUCTION

College students usually ranges from 18-22 age group. They just pass their adolescence and are at the start of adulthood. These stages are equally important as other stages of development. This period emerges from childhood and merges into adulthood. During this period, the establishment of childhood goes away and a revolutionary process of change starts. In fact, it is period of revolutionary change. It is markedly a period of growing up, during which the child develops into a man or woman. As the term is used today, it has a broader meaning than it had in earlier years. Instead of limiting the adolescence period to the time when the individual grows to maturity sexually, it is now extended until the individual is expected to be intellectually, emotionally and socially mature. It is that stage when one has to make an appropriate choice that fits the subject abilities, interest and occupational preferences. He must know what are his options and select based on his abilities and capabilities. Creativity and Career maturity is considered a primary concern.

College students develop the ability of abstract thinking through systematic intellectual development, they tend to discover, create, produce new ideas and solutions to problems, inventions and work of art, view and interact with the world in their own way, become more expressive, rearrange the existing idea that proves to be their unique personal experience. Hence, in this way, they manifest their creativity.

Modern education is based on the worth of an individual. Creativity, as an instrument of change, can act as a means to a civilized society for improving the lots of its members. The educational institutions are responsible for sharping the creativity according to the needs of the individual by creating a suitable environment so that he might achieve to the best of his abilities and become a contributing member of the

society. One way of becoming a productive member of the society for an individual is maturity. The major avenue for maturity is through one's work which can be fulfilled by selecting a suitable occupation. Selection of a right type of job and subsequent growth and adjustment in it is satisfying both to the individual and also meets the manpower needs of the society.

The role of occupation in the life of an individual has much broader psychological importance than has generally been recognized. Young men and women leaving the educational institutions and entering the world of work are faced with various problems about their career. Those leaving educational and training institutions are already under the impact of numerous variables in matters of choice-educational, vocational, social and personal. These variables appear to play an important role in the educational choices of the students which in turn become instrumental in their career choices.

The concept of career maturity is an individual's readiness to make age appropriate career decisions and to shape one's career carefully in the face of existing societal opportunities and constraints. Selection of a career and setting in it is an important task and a source of personal gratification. In the modern age of science and technology, hundreds of vocations have been thrown open to an individual. The choice of a right vocation is becoming increasingly difficult in these days. College going students is important because it is a period when a major turning takes place in the life of a student because the career will depend upon the subject selected at this level. Many a time, a student is forced to choose a career that is against his/her wishes viz.

Age and maturity can bring a new level of passion, ability and insight for creative expression. Although some areas that depend on physical performance, or accumulating and processing vast amounts of information, may become less easy or available as we

age, many creative endeavors flourish with increasingly varied life experience and the kind of vitality adult development can nurture.

II. RATIONALE OF THE STUDY

An increasing rate of changes, uncertainties, challenges and problems characterizes today's world. It is an epoch of complexity, disorder, ambiguity. The labour market is increasingly competitive, demanding employees who can successfully meet the workplace challenges, innovate, act quickly and present effective solutions to unexpected problems. In this scenario, creativity is of utmost importance, a survival skill that needs to be nurtured in different contexts. Scholars from various fields highlight the need of a great attention to the development of the creative capacity across the various levels of education, especially in higher education.

At present, the future prospect of every country rest on the educational system and vocational set up of it. The advancing countries have to look forward in their educational and vocational plans to adopt suitable practices to cope with the present and future needs of the individuals, social groups and nations. The stereotype systems in educational and professional spheres deliver little goods and hamper extensively.

Creativity with career maturity has been found to be influenced differently in different culture. The reason for the differences varies on our value system. Creativity is no doubt an innate potential, yet it is also influenced by many factors such as home environment, society and value system. Similarly, maturity of a person is influenced by the surrounding environment and value system. When students enter college level, they entered with a little knowledge of what streams of study should be taken and what will be helpful for their studies in future. Some chose the streams of what their friends or other siblings chooses, some chose because others said it’s easy. It is important for teachers as

well as parents to know the creative potentials and motivate their child to their most interest areas where that individual can express himself/herself. Therefore, the present study has been selected.

III. STATEMENT OF THE PROBLEM

This study is proposed to find out whether students who have creative talents are vocationally matured in their choice of career. Ultimately, the present study is stated as "Creativity and Career Maturity Among College Students of Aizawl district".

IV. OPERATIONAL DEFINITION OF THE KEY TERMS

Creativity is the ability or capacity of an individual to create, discover, or produce a new idea or object, including the rearrangement or reshaping of what is already known to him which proves to be a unique personal experience.

Career maturityis the term which denotes the place reached on the continuum of career development from early exploratory years to decline. It is the extent to which an individual is able to master certain career developmental tasks that are applicable to his/her life stage.

V. OBJECTIVES OF THE STUDY

1. To find out the level of creativity among college students of Aizawl District.
2. To find out the career maturity level among college students of Aizawl District.
3. To compare the level of creativity with reference to their gender.
4. To compare the career maturity level with reference to their gender.
5. To compare the level of creativity among college students with reference to their streams of study.

6. To compare the career maturity level among college students with reference to their streams of study.

7. To study the relationship of creativity and career maturity level of college students in Aizawl District.

VI. HYPOTHESES

Based upon the above objectives the following hypotheses were formulated for the investigation.

1. There is no significant difference between male and female college students of Aizawl District in their creativity.

2. There is no significant difference between male and female among college students of Aizawl District in career maturity.

3. There is no significant difference in creativity among college students of Aizawl District with reference to streams of study.

4. There is no significant difference in career maturity among college students of Aizawl District with reference to streams of study.

5. There is no relationship between creativity and career maturity among college students of Aizawl District.

VII. DELIMITATION OF THE STUDY

The study wasdelimited only to the Arts, Commerce and Science students from six (6) Degree College of Aizawl District.

VIII. METHODOLOGY

Data are like raw materials without which production in research is impossible. In collection of data, the investigator has to set up the design, describe the sampling method, the nature of population and sample, the tools employed for the collection of data, tabulation organization and statistical technique used. Therefore, the methodology and procedure followed by the investigator in the present study is discussed in the following manner.

1. Method of study:The present study is a descriptive research where survey method is employed. It is descriptive because it aims to describe the nature and present status of the phenomenon with the intent of employing data to justify current conditions and practices. It involves some kind of comparison or contrast and attempts to discover relationship between existing non-manipulated variables. It is concerned with opinions that are held, processes that are going on, effects that are evident or trends that are developing. It is primarily concerned with present, although it often considers past events and influences as they relate to current conditions. It also deals with testing of hypotheses and elements of generalization. The present study has been carried out in accordance with the requirements of the descriptive design.

2. Sampling procedure:In the present study, the population is very large and scattered over all the colleges of Aizawl district. The investigator, therefore, has employed the random sampling technique in order to select a representative sample of the entire population. Out of the total 14 colleges, 6 colleges i.e. Pachhunga University and Zirtiri Residential College (Science), Aizawl North College and J.Thankima College (Arts), Hrangbana College and Govt. Aizawl College (Commerce) has been randomly

selected for investigation. Again from each of the 6 selected colleges, 100 students from each stream were then randomly selected to represent the population.

The final sample consists of 300 students, 150 male and 150 female. The detailed split up of the sample is shown in the following table:

Table 1

DISTRIBUTION OF THE SAMPLE COLLEGE STUDENTS OF AIZAWL DISTRICT

Sl.No	COLLEGE WISE	No. of Male	No. of Female	Total no of Students
1	Govt. Aizawl North College	30	29	59
2	Govt. J. Thankima College	20	21	41
3	Govt. Hrangbana College	9	13	22
4	Govt. Aizawl College	41	37	78
5	Pachhunga University College	25	25	50
6	Govt. Zirtiri Residential Science College	25	25	50
Total		150	150	300

Table 2

DISTRIBUTION OF THE SAMPLE IN STREAM WISE AND GENDER WISE OF COLLEGE STUDENTS OF AIZAWL DISTRICT

Sl.no	STREAMS	GENDER	No.	TOTAL no.
1	ARTS	Male	50	100
		Female	50	
2	COMMERCE	Male	50	100
		Female	50	
3	SCIENCE	Male	50	100
		Female	50	
TOTAL				300

3. Tools: The following two tools were employed for data collection:

(1) Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi (1973)

(2)Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta (1989)

4. Data collection: The two tools selected in the study were administered to students of the selected college. The tests were administered in-group setting in a uniform sequence, in order:

1. Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi (1973).

2. Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta (1989).

5. Statistical techniques: The tabulated creativity and career maturity scales were classified in accordance with gender and streams of study. For analyzing the data, the investigator employed the following statistical techniques:

1. Percentage to study the level of distribution of creativity and career maturity scores of different categories of respondents.

2. Frequency distributions to find out the Mean and Standard Deviation of different categories of respondents.

3. 't' Test to find out the significance of difference of different categories of respondents.

4. ANOVA to find out the significanceof difference in streams of different categories of respondents.

5. Co-relation to find out the relationship between creativity and career maturity of all the respondents.

6. Scoring*:*Scoring was done as per the instructions given in the manuals. The tools used were:

(1) Verbal Test of Creative Thinking (TCW) developed by Baqer Mehdi (1973).

(2) Career Maturity Inventory (Indian adaptation) developed by Dr. Nirmala Gupta (1989).

IX. MAJOR FINDINGS

The data thus obtained has been statistically analyzed and objective wise findings are presented as follows;

Objective 1: To find out the level of creativity among college students of Aizawl District.

It was found that out of 300 students, 181(60.33%) students' scores were low in their level of creativity. Hence, college students of Aizawl District have low level of creativity.

Objective 2: To find out the level of career maturity among college students of Aizawl District.

It was found that out of 300 students, 222(74%) students' scores were average in their level of career maturity. Hence, college students of Aizawl District have average level of career maturity.

Objective 3: To compare the level of creativity with reference to their gender.

When comparing the level of creativity between male and female, it was found that more female have low level of creativity as compared to male, where more male have high creativity as compared to female. But there exist no significant difference between male and female college students of Aizawl District in their creativity.

Objective 4: To compare the level of career maturity with reference to their gender

When comparing the level of career maturity between male and female, it was found that more male have high level of career maturity where more female have average level of career maturity. But there is no significant difference between male and female college students of Aizawl District in career maturity.

Objective 5: To compare the level of creativity of college students with reference to their

Out of 300 respondents, 100 students at each streams i.e. Arts, Commerce and Science. And from Arts, 21 have high level of creativity and 79 have low level of creativity. In Commerce 55 have high level of creativity and 45 low level of creativity. And in Science 43 have high level of creativity and 57 have low level of creativity. It can be indicated that there exist a difference between streams of study.Therefore, there was significant difference in creativity with reference to streams of study. And that among the three streams of study, respondents from commerce have the highest level of creativity.

Objective 6: To compare the level of career maturity of college students with reference to their streams of study.

Out of 300 respondents, 100 students each at each streams i.e. Arts, Commerce and Science. And from Arts 5 have high level of career maturity, 74 have average level of career maturity and 21 have low level of career maturity. In Commerce 14 have high level of career maturity, 80 have average level of career maturity and 6 low level of career maturity. And in Science 21 have high level of career maturity, 69 have average level of career maturity and 10 have low level of career maturity. It can be indicated that most students from science streams have high level of career maturity, commerce streams have average level of career maturity and arts streams have the lowest level of career maturity.Therefore, there was significant difference in career maturity with reference to streams of study. And that among the three streams of study, respondents from science have the highest level of career maturity.

Objective 7: To study the relationship between creativity and career maturity level of college students in Aizawl District.

It was found that there exist a positive relationship between creativity and career maturity among college students of Aizawl District. Since a positive correlation is established between these two variable, the analysis explains that there is substantial positive correlation between creativity and career maturity which illustrates that higher the creativity, the higher the career maturity and vice versa.

X. SUGGESTIONS

Following are some of the measures that have to be taken up in order to develop creativity and career maturity at all levels of education:

- Education remains the biggest impact on employment success of individuals. Students need to be encouraged and supported in completing their education.
- Career counseling programs should be conducted to avoid fallacies regarding choice of subjects.
- Such counselling program should be aimed at institutional levels as well as communal levels.
- Supportive environment should be maintained specifically at the institutional levels for fostering creativity and career maturity.
- Curriculum should be developed based on the needs of the student.

XI. EDUCATIONAL IMPLICATIONS

Findings from the analysis respond to the study's research questions and help to achieve its objectives, which are to identify the level of creativity and career maturity. It has implications for students, teachers, parents, administrators and curriculum developer.

- The study of relationship of creativity and career maturity, whether positive or negative, may help parents, teachers, administrators and curriculum developer for taking up necessary punitive steps to foster the students.
- The factors involved in creativity and career maturity are to be identified and necessary guidance and counseling programmes can be taken up to reduce the problems of the students, (if any).
- The findings in the study will help the education system develop certain pedagogical models for the all-round development of students.
- The findings will also be helpful for identifying the burned up issues of unemployment.
- The study will also help education system in developing a job oriented curriculum.
- If there is any differences on findings, effective measures can be taken up to overcome the differences.

XII CONCLUSION

It can be concluded from the overall findings that majority of college students of Aizawl district have a low level of creativity and average level of career maturity.

There was no gender disparity in terms of creativity and career maturity level among college students of Aizawl District. And both genders have low level of creativity and average level of career maturity. This could be due to a complex interplay of biological, developmental and cultural factors. Under Indian cultural set up, the pattern of socialization for males and females is different. In our culture during the child rearing a male student is expected to choose a suitable career for his future whereas for females

marriage is expected to be of their primary concern. It is because of the fact that the males displayed greater level than female.

Respondents from three streams of study had low creativity and average career maturity, but, the score of Commerce stream students was the highest in creativity and the score of Science stream students was the highest in career maturity. There was a significant difference between the three streams of studies. The reason for such differences could be the fact that students who achieved good marks and grades in X^{th} standard usually opt for Science or Commerce and the rest for Arts. Students who have high marks or grades are expected to have high level of creativity.

XIII. SUGGESTIONS FOR FURTHER RESEARCH

On the basis of the present study, the investigator has found out that further research can be conducted on the following important areas;

- The same study can be taken up on a larger scale covering the whole district of Mizoram.
- A Comparative study on the same may be conducted on post - secondary and post – graduate level.
- A similar study on other variables like emotional intelligence and spiritual intelligence can also be taken up.
- More variables like academic achievement, self – efficacy, occupational aspirations, educational interest can be taken up for further studies.
- A study of socio - economic status in relation to their life skills and creativity can also be taken up.
- All the suggested study can be taken up as a comparative study between neighboring states of North East India.