

1.1 CREATIVITY AND PROGRESS

Ever since the world came into existence, man's progress has been marked by his creativity. He has differed from his early primates in course of time in viewing the nature more plastically, in understanding by being a part of it, in utilising it in order to attain higher levels of life - the difference he has recorded being the illuminative heritage of humanity in the fields of art, literature, mathematics and science. When conservation and continuation may be attributed to the need based intelligence of humanity, the glorification of the heritage has been, in itself, the result of distinct creative acts. Creativity has, thus, played its part.

Works of art by such men as Michelangelo, El Greco or Picasso, literary master pieces by Homer, Valmiki, Vyasa, Kalidasa or Shakespeare and formulation of physical principles which gave meaning to our existence in the world like those of Newton, Einstein or Darwin are standing examples of creative acts which have contributed to progressive march of humanity to modern times. It is true that many a written matter and formulation by such men as Aristotle or Plato are only of historical interest to modern reader because of the new knowledge which has superseded afterwards. But it is deplorably foolish to think that without such a genius as Aristotle, humanity would have come to the present level and made the same amount of progress.

The progress recorded in the past one and a half decade, that too, in space science in exploring and launching a successful moon-landing mission (of course, man is sure to start astro-service or cosmo-service, for the 'Q', as it is reported in the news, has exceeded 30,000!) and in microbiology and biochemistry in breaking the genetic code, in synthesising new living cells - It is no exaggeration, if somebody feels - will put many a literature of life and universe into freeze and uphold a few. What had already been disproved and discredited were, at times, platforms of thought and development. Ultimately, we can say that progress has been the result of man's creativity - his ability to think and find as many empirical foundation to his understanding of

natural phenomena, the plausibility of such foundations being decided by truth, utility, and time.

While making an analogy between creativity of an individual and that of a society as a whole, in the Encyclopaedia Britannica the authors remark -

" The psychological conditions that make a society or an epoch creative have been little studied, but it seems likely that social conditions analogous to those seen in individual creativity are important. Freedom of expression and movement, lack of fear of dissent and contradiction, willingness to break with custom, a spirit of play as well as dedication to work, purpose on a grand scale - these are some of the attributes that a creative society may be expected to have. Creativeness in society is of course a matter of practical concern, since innovation and invention bring about enormous increase in wealth and power. Man as a species has gained his substantial measure of control over physical forces and over other living things chiefly through his faculties of discrimination, abstraction, adaptiveness through reasoning and original thought. The importance of originality can hardly be overestimated."(64)

1.2 CHALLENGE BEFORE US

As a developing country, India has a multitude of problems. Though her natural resources are said to be abundant, and manpower obviously very high, lack of proper utilisation, has made her dependent on other advanced countries. Our aim has been to build up "a rapidly expanding and technologically progressive economy" (Third Five Year Plan, 1961-66). "For securing an advance simultaneously in all directions,

the available manpower and natural resources have to be used to the best advantage" (Second Five Year Plan, 1956-61).

In spite of our past efforts, the number of educated unemployed today is constantly on the increase. When there is a need for greater progress, more production, more and better utilisation of natural resources as well as manpower are indispensable measures.

Pace of progress in the modern world is very high. Man is constantly making efforts to conquer nature. This is the age of computerisation of human thinking. New inventions by advanced countries have constantly posed challenges to developing countries in matters of defence, industrial growth, food and finance. In the years to come, if India fails to gear up her resources as well as manpower towards self-sufficiency and progress, she will be victimised in a perpetual circle that makes her more and more dependent on advanced countries. For any country, to pace up or not to pace up is a question of survival or death.

Srivastava (232; p.476) makes a critical note of the prevailing situation in India in the following words:

To an outsider it appears very strange that while we need a large number of suitably trained and educated personnel in almost every field - teaching, medicine, engineering, etc., - there are thousands of graduates who are unable to find suitable employment.

Education Commission commented that our system of education is over-academic (61; p.8) and that major portion of the talent never enters the school at all. (61; p.240).

For India to be on a par with advanced countries like U.S.A. or U.S.S.R., no doubt, it takes time. But attainment of such ambitions in a minimum span of time is possible if she puts in deliberate efforts to use her talents in most efficient way. That is, pace of her progress can be increased exponentially, if her creative children are spotted out and are given proper scope, education and motivation for the unfolding of their abilities.

Further, much wastage of monetary resources can be stopped if our efforts are built up around a creative philosophy of life with an established procedure of identifying and nourishing creative talents. Creative children of today are crucial partakers of nation's progress of future. India's destiny lies in the hands of today's creative children. Today's generation will be committing irretrievable mistake if it allows them to bluish unseen and unnoticed.

It is gratifying to note that Government of India is convinced 'that a radical reconstruction of education on the broad lines recommended by the Education Commission is essential for economic and cultural development in the country, for national integration and for realising the ideal of socialistic pattern of society". (29; p.311).

On the identification of talent, the Government of India has made a significant and far-reaching resolution that "for the cultivation of excellence, it is necessary that talent in diverse fields should be identified at as early an age as possible, and every stimulus and opportunity given for its full development." (232; p. 314).

1.3 NATURE OF THE PROBLEM

How this should be done is one of the major problems that all countries are facing. Comparatively U.S.A. has taken lead in this aspect too. A quick and direct method of identifying creative ability has been through the use of psychological tests evolved for the purpose. Of the many tests evolved in U.S.A., not even one is suitable to Indian conditions, for the problems to be faced here are many. To this day, no effort worth mentioning has been made in our country. In reviewing the research work done in India in educational psychology, Aaron (1) writes -

" Creativity is an area that needs thorough exploration. A country like India cannot afford to lose creative genius. The precise nature of creativity is rather complicated since it does not bear one to one relationship with intelligence for academic achievement . . . Developing tests for spotting out creative elements among students deserves top priority. Whether tests such as the ones designed by Guilford will fit Indian conditions should be tried out."

Considerations made in the preceding pages clearly point out 'identification of creative talent' as an urgent and important step to be taken at the national level. An honest effort has been felt essential specially in the direction of developing tests for proper identification of creative elements among students.

Investigation reported in the pages to follow presents one such effort. With a view to acquaint oneself with research findings and theoretical stand-points on creativity available at the time of the investigation, a review has been made in the succeeding three chapters. Remaining chapters have been devoted to reporting investigator's own work and findings.