

## PROJECT TYPES AND USEFULNESS OF PROJECT WORK FOR YOUR FUTURE

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A project may be viewed as a set of activities carried out to complete specified work within a given period of time. Based on the nature of the activities projects could be of the following types,

- a) **Study type projects:** In this a suitable topic is identified, data collected and analysed. Conclusions are based on the results of the data analysed. A report on a study of this type usually includes a discussion with data interpretation and a comparison of data obtained with already available data. The results obtained from the study could generate new knowledge in the field of study which in turn promotes further research activities and also giving intellectual satisfaction. Examples for study type projects are as follows: study on various birds in the home garden, investigation of the relationship between income and consumption of a family unit of the community.
- b) **Problem solving type projects:** Here a problem is identified, a hypothesis is formulated and tested through observations or experiments. It is important to identify the problem accurately and interpret it properly. Few examples for projects of this type are Problem of school dropouts, the reasons for brain-drain in Sri Lanka, utilisation of the changes of behaviour of animals to forecast weather,
- c) **i. Creative type projects:** Presentation of the project findings may be in the form of a poem, drama, short revision or collection of

material e.g. a stamp collection on a theme, wall decoration

**ii. Technology based projects** can be development of an instrument, plan for a instrument, construction of a device. These projects could be self creations and new planning efforts.

**iii. Economically viable projects:** Some of the projects could be economically viable. Involvement with these type of projects would not only develop skills but also provide economic benefits. e.g. running a flower plantation, planting mushrooms or medicinal plants at schools or home gardens, rearing ornamental fish.

The above project types have been identified under the new educational reforms as suitable to be carried out at school level.

- d) **Research and development projects:** In general research and development is defined as any creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications. It includes usually basic, applied research and experimental development. These projects primarily consist of investigative activities undertaken to acquire new knowledge. The novelty and originality of the investigation are the key factors that separate research

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and development from non- research and development activities.

In Sri Lanka, projects of this type are carried out by researchers mainly in the Universities and Research Institutes. The National Science Foundation(NSF) awards grants to researchers to conduct research in various fields such as Agricultural Sciences and Forestry, Biological Sciences, Biotechnology, Chemical and Earth Sciences, Energy, Physical Sciences and Mathematics, Engineering and Built Environment, Health Sciences, Natural Resources, Science Education, Social Sciences, Science and Technology Information and Traditional Medicine. Examples of projects funded by NSF are

- Development of solar cells based on dye-sensitised titanium dioxide with solid electrolytes,
- Analysis of pesticide residues in vegetables and urine of pesticide sprayers,
- Development of swinging lugs reversible cage wheels for small and medium power tractors
- Implementation of school based assessment(SBA) in environmental studies in sixth grade classrooms in nine selected schools

Uses of project work are numerous. Engaging in project work would help develop and sharpen latent skills. It also help to develop creative abilities while taking corrective decisions which are required for leaders with independent thinking. In addition to the above, the following features would develop in a project worker too.

- Abilities to grasp concepts and reason analytically

- Motivation and perseverance in achieving objectives
- Capacity for independent thought
- Organisational skills
- Independence as a learner
- Self-confidence
- Establish a good working relationship with the allocated teachers, members of the team and others working in the related areas
- Language skills which are particularly important for report writing and presenting of project

The activities under the project work which lead to develop the above features in a project worker are described below in detail.

### **Developing Skills for Creative Thinking**

Originality in some form is a crucial component of research type projects, however it is good to have this feature in all types of projects. The development of original ideas required for project work can be enhanced through the use of different techniques to support creative thinking. It is necessary to understand how creative thinking works for the project worker and which techniques suits for him or her. Several techniques are given as follows, talking things over with experienced people like teachers, researchers or university academics, keeping an open mind, brainstorming, concentration on anomalies, viewing the problems from imaginative perspectives etc. It will be seen that many of the so-called techniques in project work are actually based on the use of common sense.

### **Planning Skills**

Irrespective of the field of study, a project worker needs to map out some sort of plan for the programme of work ahead. Such a plan can benefit the project worker as follows,

◆ Prevent the worker from spending too much time on certain activities because he or she enjoys the particular activities while not attending to others which are unappealing

◆ Gives a sense of direction in the execution of the project

◆ Provide basis for reflection

◆ To plan more effectively the next time if previous plans prove to be unrealistic

Much of project work is routine and straightforward and it can be most efficiently carried out by careful planning. So it is clear that project work would increase good planning skills of a person. The training obtained by doing project work at school level would strengthen the planning capabilities expected of students in their future programmes especially studying at University level.

### **Management of Time**

It is a common experience that time seems to disappear and one wonders where it has gone and what has been achieved. Some students keep a diary over a period of time, logging the various activities in that day. There are no precise rules on how to spend the time on a project. The student has to be satisfied with his own management of time. It should be realised that time spent on leisure activities or talking to people is not necessarily time wasted. It will help to maintain physical and mental health. However as 99% of project work is routine with field or laboratory work, lectures, library reference, meetings, reporting, vacation and other, it is important to manage time more effectively. Thus one benefit which can be received from project work is the skill in time management.

### **Develop Reading habits**

Reading makes a complete man'. The project student will have to read more to collect

information for his work Hence the project work develops the reading habits of students which in turn helps to increase their awareness on social, environmental and financial issues and other matters not directly related to the project work.

### **Co-operating with others for mutual support**

A successful project-student relies heavily on the support of others, mainly to suggest leads, to give informed judgements, to boost motivation and to provide constructive criticism. The project student must work closely and collaboratively with other students, teachers, instructors, family members and friends. This is a good attitude which should be developed by a person throughout the life. Then others of the society would definitely benefit from a person of this calibre.

### **Report Writing**

As report writing is an essential part of project work where the student learns to present his or her findings and observations in a written ordered pattern which makes sense to the reader.

### **Presentation Skills**

It is important for students to be able to give confident and effective presentations on their completed work This would help the student to

- structure and evaluate the work, which in turn enables his or her to spot any flaws in the arguments, and to identify new ways to move forward
- to get feedback from others on what has been done so far and to benefit from their advice on what might be done in the future

Experience in making presentations would help develop self-confidence and the project work

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provides the suitable environment for that opportunity.

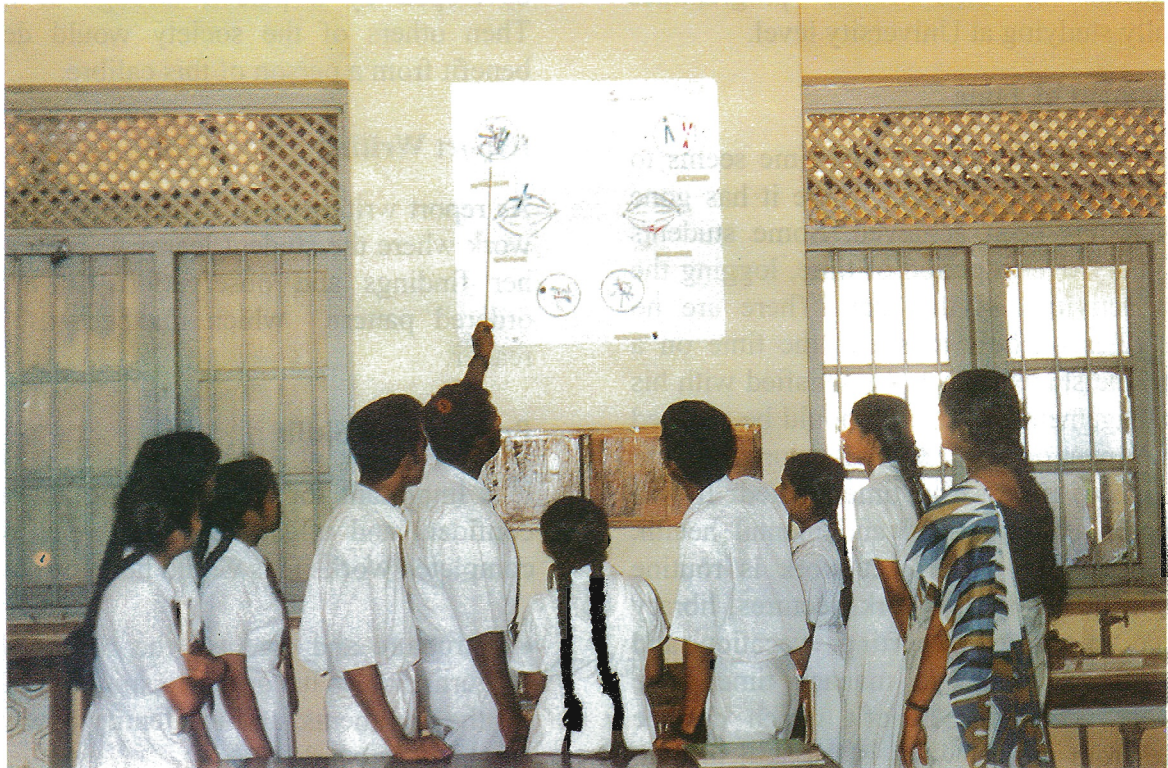
### **Increasing Skills for Employment:**

The project work would make a significant contribution towards improving the skills required for varieties of employment opportunities as clearly outlined in an earlier part of this essay. This would be particularly beneficial for students who may not wish to pursue further education at tertiary level. But all students would assuredly benefit from this

aspect of this educational programme at school level.

### *References:*

- 1. Teachers Hand Book on 'Skills Development Projects for Life' (1998), for G C E Advanced level- projects, published by National Institute of Education, Maharagama*
- 2. The Research Student's Guide to Success (1997), by Pat Cryer*



**Figure 3: Project work helps develop presentation skills of students**