

THE PROJECT : A BASIS FOR EFFECTIVE TEACHING/LEARNING

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Potential in the subject matter incorporated work with young people provides unique opportunities for helping them reach their potential. This contention is based on a review of what is known about how young people learn effectively : (1) through real-to-life situations; (2) through meaningful identification with adults; (3) through demonstrated examples of desirable behaviour by adults who expect to teach ; and (4) through the opportunities inherent in the study of natural sciences or other specific subject matter for helping young people understand themselves and the world about them.

Such a view of the basis for effective work with young people evolves around the project method. It is the purpose of this article to explore project ideas in some detail—first, as a means of getting across specific subject matter; second, as a means of providing opportunity for personal development. The arguments presented in this paper will be based on personal experience and study and on more than a half-century of historical evidence on the use of the individual project in 4-H Club (a youth programme conducted by the National Extension Service of the U.S.A.).

The Project Idea

The project idea evolved in the U.S.A. through the efforts of formal educators. "As early as 1828, the teacher of a boarding school in Butler County, Ohio.... allotted parcels of land to his students and had them grow cucumbers, radishes, tomatoes, shrubbery, flowers. These boys of club age were engaged by doing under the stimulus of competition, just as do the club boys of today."¹

Liberty Hyde Bailey, Cornell naturalist, tried to counteract the idea that learning

must be about remote things. He wanted to convince rural boys and girls that scholarship began in their backyards, in the grass underfoot, the tree that shaded the house, and the crops that grew in the fields. He used to say, 'there is as much culture in the study of beet roots as in the study of Greek roots'.²

The use of the term "project" in the field of formal education came into popular usage just prior to 1920, as witnessed by the number of books on the topic published about that time.³ Writing in 1920, Stevenson⁴ stated that, historically, the word "project" had been used for many years in business and in some specialized forms of education with rather vague meaning. However, he stated that it had been accepted more recently by the United States Department of Agriculture as an outline plan for carrying out a piece of cooperative work.

"Project" was defined and described by these early writers in various ways. Branom stated that :

The project is concerned with four closely related parts. Four factors are related to the development of the child through the project method : (a) the macrocosm, or general world of knowledge; (b) the personal world of the child; (c) the movement of the child from his own world further into the larger world; and, (d) the personal world of the child after he has met the new situation.⁵

Stevenson defined project as "a *problematic act carried to completion in its natural setting*." He elaborated the definition by noting that :

- (a) there is implied an act carried to completion as over against the passive absorption of information; (b) there is insistence

upon the problematic situation demanding reasoning rather than merely the memorizing of information; (c) by emphasizing the problematic aspect the priority of the problem over the statement of principles is clearly implied; and (d) the natural setting of the problems as contrasted with an artificial setting is explicitly stated.⁸

In discussing the project in home economics, Charters defined it as "an act carried to completion in its natural setting and involving the solution of a relatively complex problem."⁷ He describes the idea of "carrying to completion" as actually doing and the "natural setting" as "an attempt to return to the concrete conditions of home education from the abstract isolation of school."⁸ He identified the following advantages of the project:

1. The natural setting provides a strong motive.
2. The natural setting and the great multiplicity of its coherent subordinate problems make the intellect function in a fuller tide of activity.
3. The acquisition of skill in carrying out processes in actual practice.

Project Characteristics.

Snodden, who worked with Stimpson in Massachusetts was characterized as a man not only interested in agricultural education but one with an interest in and with contributions to general educational theory. Snodden is credited with using the term "project" to describe a unit of educative work in which the most prominent feature was some form of positive and concrete achievement. He identified the following as primary characteristics of the project:

- (a) the undertaking always possessed a certain unity; (b) the learner himself clearly conceived the practical end or outcome to be attained, and it was always expected that this outcome was full of interest to him, leading him on, as to a definite goal to be won; (c) the standards of achievement were clearly objective—so much so that the learner and his fellows could, in a large part, render valuable decisions as to the worth—in an amateur or in a commercial sense—

of the product; and, (d) the was of such a nature that in achieving his desired ends, he necessarily have to apply much of his knowledge and experience—before not consciously held—in this way (e.g. art, science, special tool-skills)—and have to acquire also some new and skills.⁹

McMurry¹⁰ identified two kinds of projects:

1. One undertaken by a child, best when he is pressed by or need.
2. Projects of others which he appropriates, into which he gives his individuality, and to which he gives his individuality.

He maintained that the project is a self-directed organization of physical resources to achieve a well-defined result.¹¹ It suggests a return to the common, to applied science, to daily life, to the concrete world. What elementary children need, he said, is "not abstract principles, not the systematic study of the sciences (an impossible thing), and Seever's noted agreement on the fact objective, convincing demonstration of main ideas and uses of science in the neighbourhood and in the larger world." In identifying general recommendations for the 4-H programme should complete the 4-H programme should complete, rather than duplicate, the project well worked out is science training received in school:

The project well worked out is science training received in school: object lesson in the process of providing a "field laboratory" in which demonstration of the right collecting, organizing, and school. For example, principles of knowledge. It might be called "the natural learning" of tractors, automobiles or other engines. executing a real project, a demonstration of the fact that the child has acquaint members with subjects before knowledge. He is mainly they are studied in school. This might be reached. Struggling to agent he has his eye fixed on reproduction which would prepare purpose, he finds himself in a world of knowledge waiting to use. The best way to acquire is to get after some important compels us to learn what is a means of reaching this aim

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because they are not enrolled in the science courses. This is especially true in schools where science curricula do not include subjects such as entomology or human behaviour.¹²

The California state 4-H Club staff identifies the approved project as the basis of state-wide 4-H Club programmes. They stated that the primary purpose of such a youth programme is to develop the boy and girl; that the project is unique as a learning experience; that the project in a field of agriculture or home economics or an area related to them, carried by the member, is basic; and that the projects should be designed to provide a challenge to all members.¹³

Tyler's ideas of the potential of a youth programme, such as 4-H, has direct bearing on the use of project work.¹⁴ He says that such a youth programme can:

1. Provide meaningfulness to learning that otherwise may be unreal to students.
2. Tie together concrete observations and experiences of children with explanations of why these things happen.
3. Provide for producing objects and carrying on activities where accomplishments can be seen directly.
4. Provide for relating to adults in the community beyond his own parents and teachers that may be unlike any other relationship otherwise available.
5. Provide freer career exploration than is normally possible within the home and school.
6. Provide opportunity for greater orientation to the world beyond the immediate community.
7. Provide for emphasizing inquiry.
8. Provide opportunity for a wider range of voluntary choices than is possible in the school (more flexibility of learning activity).

Related Research

Christensen¹⁵ studied the effects that selected factors in a student's supervised farming

scale scores had highest total
This also held true in terms of
and figures and science and
for problem solving.

mends that additional

Even though a number of questions raised as to the application of the project work in other types of youth do suggest that ownership and have an influence on student and student interest in the subject.

know or testable knowledge. We would hold true with other types or under other circumstances is not. It appears from the findings that and experience may be so closely other that the extent of influence other on acquisition and retention

ever, the results of this well planned executed study suggest that the own or experience something unique the opportunity to practise or apply influence both the acquisition and knowledge.

would in general be forgotten

which can be commonly applied to the study of the happenings of life and method which are frequently used might be retained with much less than in tests requiring generalization.

ability to generalize from everyday phenomena to explain everyday phenomena.

SOCIAL VALUES IN F

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important value towards farming is a revealing fact. The farmer tends to put a premium on hard work because primitive farming as carried out in India does mean painstaking work and anyone specially with low landholding and a subsistence economy cannot afford to take things easy. Year after year seen

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Scientism Freedom Truth

season, not only does the farmer have to work hard, he has also by sheer physical effort to offset the effects of the vagaries of the weather and the scarcity of irrigation facilities. One can say that hundreds of years of traditional

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	Scientism	Freedom	Traditionalism
S_1	1.671	1.863	1.893
Hardwork			
S_2			
1.957			

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S_3		
1.957		

pressed on the farmer that cultivation and hard work cannot be divorced from each other. Due to this particular frame of reference, he still tends to feel that leisure has no place in farming in India and that any programme that emphasizes leisure cannot have taken into consideration the occupational hazards of Indian farming into consideration, with the result that the average farmer here tends to

2. Familism

The gregariousness of the Indian farmer has been stressed by sociologists, anthropologists and others who have had a chance to observe

have even gone to the extent of describing

urban gregariousness as a congregation of numbers, whereas rural gregariousness is a communion of personalities. In the rural areas there is a great deal to share—disappointments, hopelessness of the future, the present struggle against a hostile environment, and things of this kind. Although the Indian farmer congregates at meeting places in the villages, it is not there that he unburdens himself of his difficulties. He meets others

at the bathhaks for some type of entertainment and also to spend those interminable evenings when he has no farming operations on hand.

but it is to the family he turns for advice and encouragement in the day to day conduct of affairs. Evidence has been forthcoming that despite the patriarchal model of the farmyard families, the women have a definite say in the important decisions that are to be made in the home. And children, especially the educated ones, have been known to be able to influence decisions one way or another. Psychoanalytically oriented anthropologists have pointed out that the warmth of the family circle has helped the Indian farmer to weather the hopeless nature of the problems he faces without breaking down altogether. Dr. Spencer Hatch (1947) has pointed out that poverty and fear of extinction are the driving forces behind all sorts of co-operative efforts. Judged in this context and in the light of what has been said before, the excessive familial attachment of the farmer may be far from being entirely disinterested.

3. Traditionalism

It is an historical fact that cultures handed down from father to son without records of any kind except the memorial ones, tend to be tenacious. This can be explained perhaps by invoking learning theory. In the absence of visual symbols which can adequately convey the salient points of a culture, the learning population has to adopt the stratagem of over-learning to prevent forgetting. The Indian farmer is ingrained in his traditionalism on account of his overlearning of the cultural mores and norms. Another aspect of it is that such a farmer with his lack of literacy and overlearning of cultural stereotypes tends to develop an attitude of reliance on anything which has been historically handed down. Looked at in this light, traditionalism is not an irrational attitude because it is the acceptance of proven norms and practices as against the innovation which has not had the benefit of being tested over scores or hundreds of years. Primitive farming thus has become more than a profession; it is a way of life, a proven philosophy.

4. Freedom

All observers, whatever their calling or discipline, are agreed perhaps on this point that the farmer's profession, by its very nature, makes for freedom of choice as also of action. The farmer therefore cherishes this value as

being one of the top four among values. Perhaps those farmers who seek some frames of reference which explain the various frustrations that they describe Freedom as one of the most important values towards farming in a country not far fetched to say that the farmer, in a very air, gregariousness, traditionalism all tend to go together as the farmer proves himself to be realistic related values. This expectation is amply proved by the findings in the study.

5. Scienticism

Scienticism with an intermediate rather an ambiguous position in values. The fact that it enjoys a higher position than economics, security and leisure indicate that farmers are beginning to appreciate the benefits of scientific farming as a power to improve their lot. The mean that the farmer has a good contact with the IARI extension work created certain types of awareness on the scale again it will be seen that it occupies a positive dimension as of last three values dealt with below.

6. Economics

The low ranking of economics in the study is interpreted under two aspects. First, with the traditional farmer does not have a planned economy in the economic disaster with the type of farming always weighs the outputs against the inputs in terms of money. If the land, his freedom. Both these courses of him with enough crops to fulfil his basic needs he is not much interested in how he can earn. And it is also seen that the farmer has no clear concept of economics of the monetary value involved.

may sell his grain so that he may be able to purchase the necessities of life, it is essentially a barter system. He does not usually account as a result of his transactions. He converts the money obtained into commodities.

Secondly, the low ranking of economics in the study can be seen as a defence mechanism. People thriving on the fruit of his labour remain poor whereas the traders are rich. And this is the farmer can do to improve his circumstances, it is but natural.

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better farming practices has a greater chance of success.

Summary

The results of many research projects both in India and abroad have pinpointed the importance of sociological factors as determinants of change-behaviour. The present study was undertaken to determine the hierarchy of socio-psychological values adopted by the farmers in Delhi territory. The sample (N=175) was drawn by the stratified random sampling technique from nine villages of Kanjhawala Block. The paired comparison technique was used to study the preferences among eight social values. By appropriate statistical techniques these preferences were converted into scale values arranged in order of their dimensions. The final hierarchy which emerged as a result of this study appertains importance to these values in the following order, the first one denoting the most preferred value:—

1. Hard work
2. Familism
3. Traditionalism
4. Freedom
5. Scienticism
6. Economics
7. Security
8. Leisure

The low ranking of the value economics has been interpreted in terms of the losing battle the farmer wages against environmental forces and also in terms of his being a passive observer of other people getting rich on his labour. This attitude is seen as a defence mechanism to overcome his frustration. The high values given to hard work, familism, traditionalism and freedom have to be interpreted within the frames of reference which the farmer has found to be ideally suited to contain all these values and to reconcile his lot with hazards of farming in India.

It has therefore been suggested that drives towards adoption of improved farm practices stand a chance of being successful only in so far as these programmes are able to incorporate the traditional values which the farmer likes to cling on to. Programmes which emphasize this aspect and seek to introduce values of economics and security as adjuncts stand a

better chance of being accepted with alacrity. The importance given to scienticism is seen as a growing awareness among the farmers of Kanjhawala Block of the advantage might accrue by the adoption of practices as advocated by the I.A.

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