

WORKBOOK ON BAMBOO CRAFT

Special project report

by
BOBAN P VARGHESE

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INDUSTRIAL DESIGN CENTRE

I.I.T BOMBAY

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Guide
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APPROVAL SHEET

The special project entitled 'WORKBOOK ON BAMBOO CRAFT' by BOBAN P VARGHESE is approved in partial fulfillment of the requirements for the Master of Design Degree in Industrial Design.



Guide :Prof. A.G.Rao

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Thanks to the craft teachers of Central School, I.I.T Bombay who gave me
valuable information regarding the craft teaching in the schools.

ABSTRACT

Education has a crucial role to play in the development of the country. The early years of childhood are vitally important to the development of the individual since it is the period during which the maximum development of intellectual abilities occurs. Existing education system lacks the creative involvement of the pupils. This system is often alien and unrelated to childrens environment.

Design education at school level can develop creative thinking, innovative ideas, and the problem solving capacity of the student. This can be introduced into the schools through craft teaching, where students can learn the craft and the basic principles of design, simultaneously.

Bamboo craft is a well developed craft in our country, which is going through a very bad phase at present. This craft could be introduced into the school curriculum with necessary changes to suit the academic environment. The idea behind this workbook is to guide the teachers to plan and conduct this course in the most successful way, among children of different age group. This book contains the necessary information about bamboo, the bamboo craft and the basic tools required for working. It also deals with the methodology by which this course should be conducted in the schools, through craft oriented and academic subjects oriented exercises. These exercises could be modified depending on the local conditions like availability of the materials, facilities at the school, reactions of the students etc.

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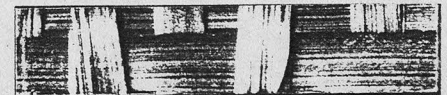
Guide: Prof. A.G.RAO

INTRODUCTION

Our education system is language oriented. Most of the time information passed over to the school children is through abstract images. Since these images have no direct relationship to their immediate environment, it is difficult to understand and visualise.

Design education could help in the visualisation and creative thinking. Craft is the result of years of almost unconscious experiment and evolution. Once lost, nothing can replace it. Indian crafts today is at the crossroads. We have national policies to revive these rich crafts.

Craft teaching was introduced in the schools to popularise the crafts and expose the students to the new way of learning while doing. But due to the lack of proper planning, this could not succeed. The idea of this workbook is to give necessary information regarding the bamboo craft and to help the teacher to plan the academic syllabus properly.



1. CRAFTS IN INDIA



Craft is mans first technology, the technology of the hand. A craft at its finest represents mans need to create simultaneously with mind and hand. Craft is the result of years of unconcious experiment and evolution.

So exquisite was the workmanship of handwoven shawls, brocades, printed textiles, ivory and wood carving, basketry that throughout the 18th and 19th centuary India was known to other countries as the trade route more by her crafts than by her art, religion or philosophy.

Indian craft today is at the crossroads and the craftsman is in an uneasy situation due to several reasons like changing life style of the people, marketing patterns and flagging design sense etc. In india we must recognise the fact that craft is an industry employing several thousands of workers. However at pressent except for handloom products, craft objects have lost the role they used to play in daily life. Craft remains neglected area in development efforts. If craft products are not related to everyday needs, the industry may turn to manufacturing of curios articles for home market and exports.

If crafts have to return to their old role in daily life, the craftsman may have to update their knowledge and skills as t he craftsman in Scandinavia and Japan did. They accepted modern tools , materials, and methods and were successful in maintaining their position in home market.

In India similar efforts in handloom products have shown excellent results.

Developing new designs to cater to the challenging needs of the people, bringing new methods and tools to cater these could revive these rich crafts, if it is assisted with a new generation of trained people in the respective fields.

It has been proved scientifically that doing with the hands can develop the creative thinking of human being.



2. SCHOOL EDUCATION IN INDIA

Education has a crucial role to play in the development of the country and the upliftment of the rural poor. Experiments shows that investment in primary education yields the highest returns.

The early years of childhood are vitally important for the development of the individual; since it is the perriod which the maximum development of intelleuctual abilities occur.

According to 'PIAGET' children develop concepts spontaneously by perceiving and selecting properties that are common to their range of experiences. Hence they must have concrete experiences from which to construct reality and only in consequence of their mental operations on the environment will they have concepts that will give meaning to the words they hear or read.

At present we teach them more through language and abstract symbols than through objects, building models, simulating situations and environment where children can directly feel and experience things.

In this context the above said problems can be solved by introducing design education in schools. It can develop problem solving capacity and at the same time doing things with the hands will develop skills and inculcates respect for the crafts and technological workmanship.

These methods are being practising in 'Kishore bharathy' at Hoshangabad and J Krishnamoorthy's school at Varanasi and found successful.



3. CRAFT TEACHING IN INDIAN SCHOOLS

Craft teaching had been introduced in some of the schools of our country. A number of new schemes are being introduced replacing the existing.

The way in which it is being practised suggests the need of rethinking in this issue. It totally lacks direction or concrete aim

From the studies conducted in the central school, I I T Bombay, I could identify the major problems regarding these schemes.

They are:

- Lack of specific course structure, with the result the teacher doesnot know what to teach.
- Lack of response from the students, their parents and fellow teachers. This is mainly due to misunderstanding.
- Lack of facilities, tools, good environment to work etc. A well designed craft room should be the solution.
- Students should be motivated to involve into these activities.

These are the major drawbacks of the existing system and proper planning is necessary to solve these problems.



4. BAMBOO CRAFT

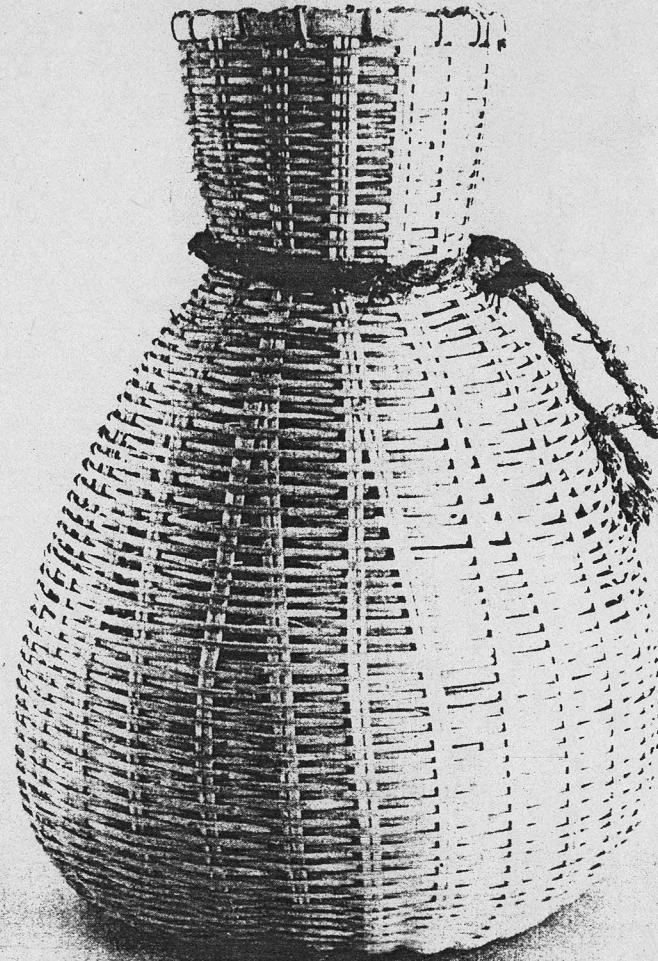
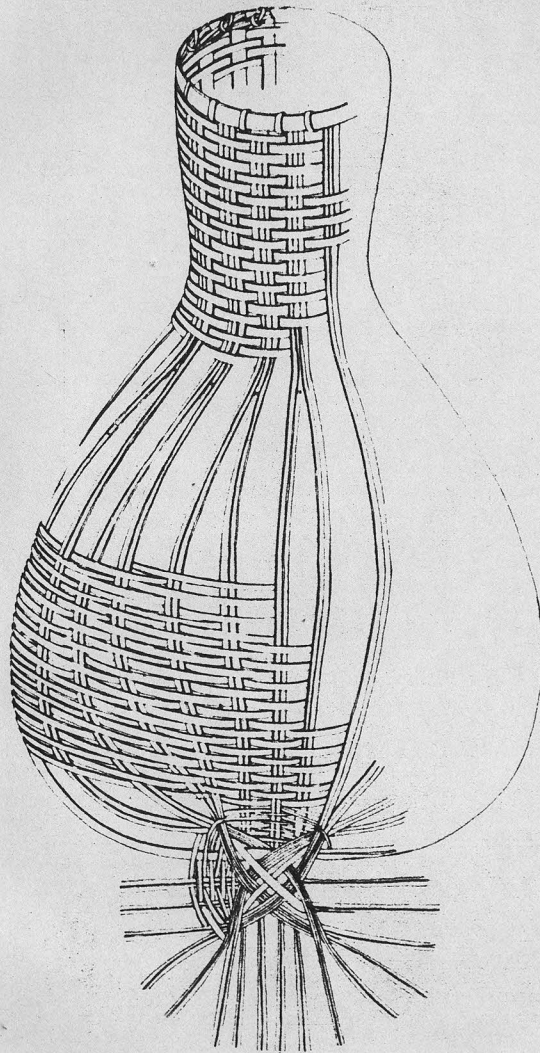


Bamboo is one of the most extraordinary plants and one of our most underused resources. It grows faster than any other plant on earth. Astonishing vitality, great versatility, light weight strength, ease in working with simple tools, striking beauty both natural and finished state these qualities have given bamboo a longer and more varied role in human cultural evolution than any other plant. It has been most widely used for shelter, food, paper and countless articles of daily use like water containers, plates, spoons, mugs, mats, baskets of various designs for different functions.

Bamboo craft in our country has been developed through centuries. There is a concentrated development Bengal, north eastern states of India and in the southern states of Kerala, Tamilnadu, Andhra Pradesh etc. The use varies from the construction of suspension bridges, bamboo houses of Assam and Tripura to water container, furniture, hookha etc. from bamboo culms.

The use of bamboo has been varying from very highly functional products like bullock carts, baskets for carrying





grains, fire wood etc. to a highly decorated mats, baskets haversacks etc. where functional requirement is not the primary consideration.

The skill at which the material is being exploited to attain such high quality products clearly indicates the supremacy of the craftsman. The ingenuity of the craftsman in developing products are remarkable.

The sense of detailing and the technique used to attain the quality clearly indicates the master mind behind and the skilled hands, developed through years of hardwork, behind these products.



5. TEACHING BAMBOO CRAFT IN SCHOOLS

The most important thing in teaching bamboo craft is to create an awareness among the students, their parents and fellow teachers regarding its usefulness. It could be used as a tool to teach design education, to develop problem solving abilities and the creative thinking of the students.

This learning may help a student dropping out from the school, to shape his career in the future.

The most difficult part is to design a curriculum which can help the children to learn the bamboo craft and the design education simultaneously within the academic restraints. There are no information source to help the teacher in this matter. Hence this book.

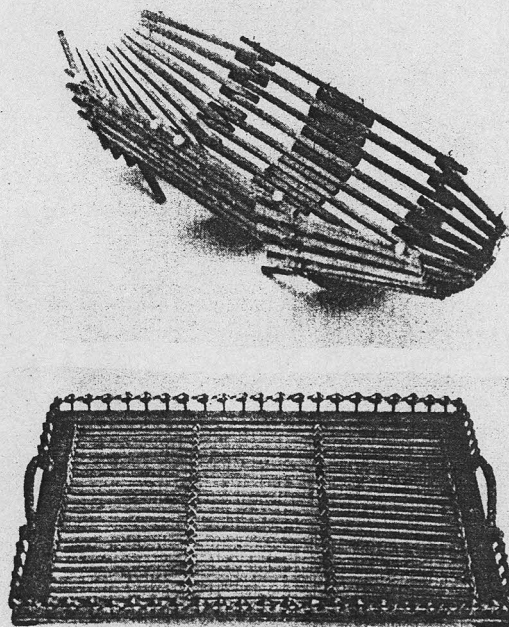
It has been decided to introduce the bamboo craft from the 5th standard to the 7th standard along with other crafts like leather, pottery, paper craft, toys and dolls etc

Students can learn the basics of cutting, splitting, stripping, and joining bamboo to bamboo and to other materials. These skills are developed through making simple

products like pen/pencil stand lampshades, flower vases etc. From 9th standard onwards this course could be taken as an elective where the interested students can further learn and master this craft.

The workbook is designed as a guidebook and an information source for the teacher so that he can sketch out a course structure for children of different age groups. This book is in two parts. The first part explains the significance of craft teaching, design education, bamboo craft and a detailed description of bamboo, its properties, preservation etc. The second part deals with the necessary tools required for working, types of joineries and the exercises for the students.

There are two types of exercises given in this book. The first series is intended to develop basic skills to work on bamboo and the second set related to academic subjects, with an emphasis on developing the creativity and problem solving ability of the students.

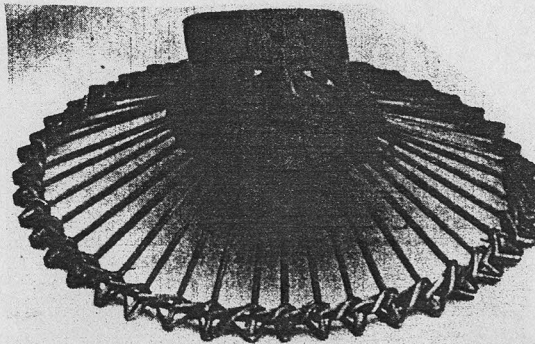


Children are asked to make the products with the help of the sketches given in the book. After developing this, they should develop more products based on the same techniques. The possibilities are given in the form of sketches.

The page setup is designed to accommodate as many sketches, photographs as possible so that it would be easier for the children and the teacher to understand and visualise the information given.

This book helps the teacher to prepare a bamboo studio giving details of the tools and the environment required.

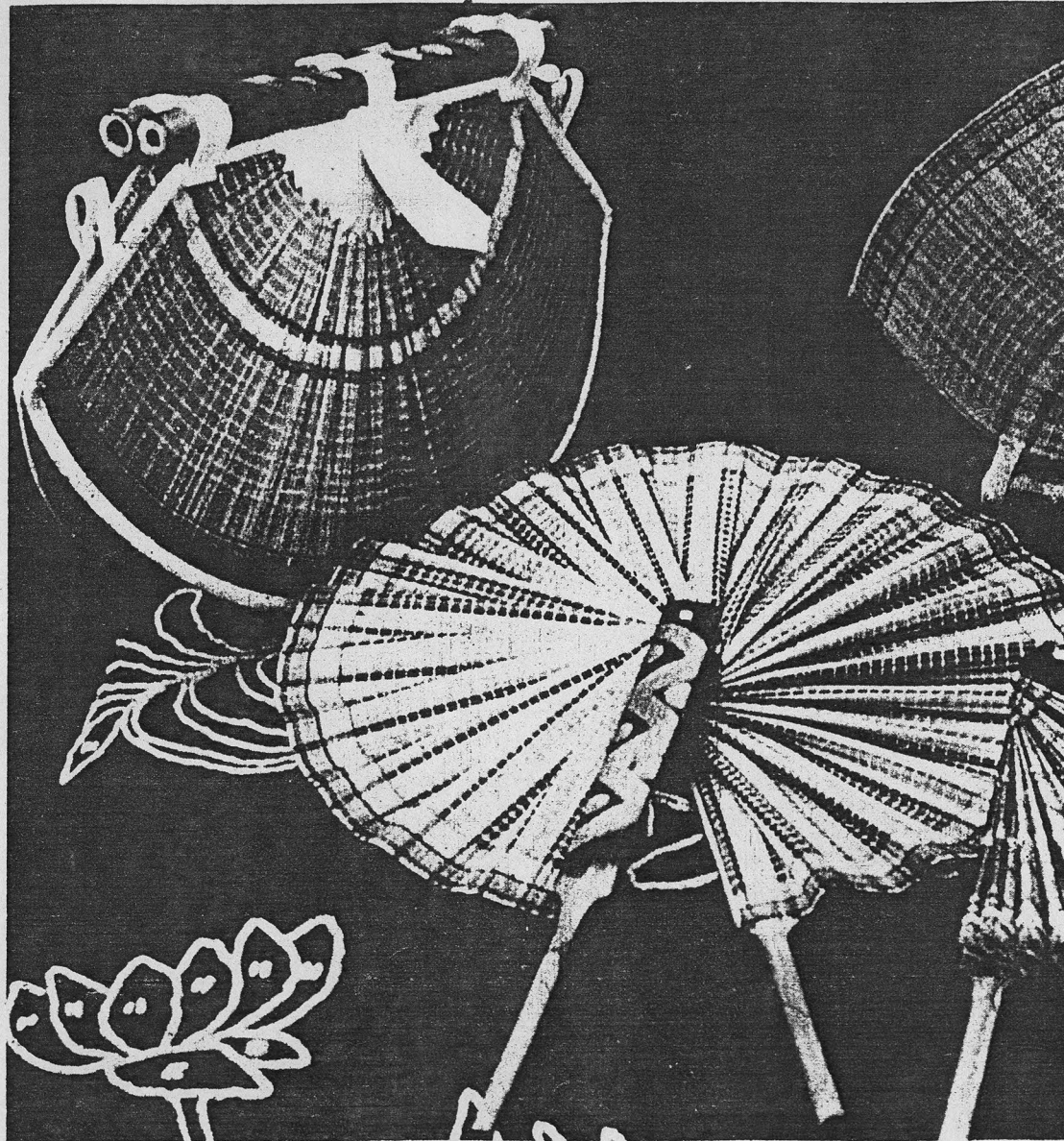
In order to maintain the spirit of the course, other activities should also be developed along with the classwork. A series of workshops could be conducted, during weekends or summer vacation, with the help of a local craftsman so that the children will get a chance to work with craftsman. Periodical visits to the local bamboo craft centre should be arranged once in six months. This could give an insight to new products and manufacturing techniques that are being used by the craftsman.



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CONCLUSION



The significance of the rich craft of our country could be exposed to the younger generation through these craft teaching techniques. Let us hope that this may lead to a better understanding of our crafts and the proper utilisation of our resources in the future. And at the same time, it offer a new direction in the learning process which could help the children to learn and visualise more efficiently and quickly. Let this be a beginning towards a better tomorrow.



BIBLIOGRAPHY

- 1 *David Farrelly* : **The Book of Bamboo**, 1984, Sierra club, San Francisco.
- 2 *M. p. Ranjan, Nilam Iyer and Ganshyam Pandya*: **Bamboo and Cane crafts of NorthEast India**, 1986, N. I.D. The development Commisioner of Handicrafts, New Delhi.
- 3 *Saraf D. N* : **Indian crafts- development and potential**, Vikas publishing house, New Delhi.
- 4 *kamaladevi Chatopadyaya* : **Handicrafts of India**. Indian council for cultural relations, New Delhi.
- 5 *Sudarshan Khanna* : **Dynamic Folk Toys** : Office of the development commisioner for Handicrafts.
- 6 *Arvind Gupta* : **Khel Khel Meim** :National Council for Science and Technology Communication, New Delhi.
- 7 **Design as a strategy for developing economy**, 1987. Working paper presented by Industrial Design Centre, I.I.T Bombay for the department of Education, Ministry of Human Resources Development, Government of India.
- 8 **Design Education** ;1st National Seminar on Design Education, Jan 1981, organised by I.D.C; I.I.T Bombay



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