INTERACTIVE
SCIENCE
AND
TECHNOLOGY CENTRES

Compiled by Stephen Pizzey

SCIENCE PROJECTS PUBLISHING
This book is dedicated to Dr Stephen Carter, founder of the Buxton Micrarium
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INTRODUCTION

Stephen Pizzey

Stephen Pizzey studied physics at Sheffield University before working on research and development projects in materials science for the electronics industry. He joined the Science Museum in London in 1975 to develop exhibitions on modern science. Later, he was involved with setting up the new National Museum of Film, Photography and Television, becoming Deputy Director there in 1981. A firm believer in the hands-on approach to the presentation of science, he joined Professor Richard Gregory in Bristol as project manager for the Exploratory. More recently he managed the Fund for the Development of Interactive Technology Centres, established by a Sainsbury Family Trust to initiate centres in the UK. He is now developing his own 'Discovery Dome' a Hands-On Science show which will begin its tour of the UK in 1988.

There is now great interest in presenting science and technology to the public through interactive ‘hands-on’ exhibits which allow the visitor to explore natural phenomena and experiment with technology. The names of some of the centres gives a clue to their nature – EXPLORATORIUM, EXPLORATORY, DISCOVERY PLACE, QUESTACON, TECHNIQUEST, PHENOMENA, TESTBED – the emphasis is on exploring and finding out for yourself. Once inside such a centre EXPLAINERS, HELPERS or PILOTS are on hand to discuss the exhibits and assist if required. The atmosphere is informal, welcoming, at times exciting and always entertaining. The centres themselves can be and are housed in almost any type of building from modern shopping centre units to historic buildings and once established form a focus for events, special exhibitions, lectures and training courses.

In the UK, the seed capital for setting up interactive science and technology centres has been provided mainly through educational charities and the Government Department of Trade and Industry. It remains to be seen whether large-scale funding will eventually become available. Elsewhere, particularly in the USA, there are major regional and national centres already in existence. The Ontario Science Centre in Canada and, more recently, the vast Cite des Sciences et de l'Industrie
at La Villette, Paris are examples of well funded government sponsored projects. In India a network of some thirteen centres which share ideas, development costs and resources has been drawn together through the National Council of Science Museums of India which is establishing a central research and training facility. The Exploratorium in San Francisco, founded by Dr Frank Oppenheimer, has inspired many groups throughout the world to follow his example and prepare demonstrations and exhibits with an open ended outcome dependent on the visitors’ input. The excellent ‘Cookbooks’ prepared by the staff at the Exploratorium give details on how to make many of their exhibits and have given many groups and individuals the confidence and know-how to get started.

Fragments of this interactive approach have existed in major museums for some time, the Science Museum (London) Children’s Gallery, the demonstrations at the Palais de la Decouverte (Paris) and some exhibits at the Deutches Museum (Munich) must have helped Oppenheimer formulate his own plans, but it was the Exploratorium which gave form to a new kind of institution with a truly hands-on approach.

Recently opened centres in the UK include the Science Museum’s Launch Pad gallery, the Exploratory in Bristol, Techniquest in Cardiff, Technology Testbed in Liverpool, a small centre at Green’s Mill Nottingham and the delightful Micrarium at Buxton. There are also other centres planned for Winchester, Manchester, Birmingham and Jodrell Bank. Work has also begun on a travelling Discovery Dome.

This book is intended to contribute to a growing campaign to encourage the setting up and continued funding of science and technology centres and help develop channels of communication between interested parties in government, education and industry. For Part I, the authors of each section were approached to write profiles of their projects, in many cases as the projects were developing. The projects themselves were selected to illustrate the diversity of approaches and locations. Part II covers the use of volunteers, student projects, setting up a workshop, market research, evaluation of exhibits, applying for grants and exhibit design - topics of interest to any project still at the planning stage. What has emerged is not simply a catalogue of advice but something altogether more fascinating and interesting in the form of contemporary personal accounts which highlight the sheer drive, motivation and ingenuity of the originators. I hope this book will be seen as a tribute to them.

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