

## Exciting Experience In A Box



Can you wrap up the world and put it in a box so children can study it in their classrooms? Not quite.

But you can wrap up parts of it.

You can wrap up things like tumbleweed, authentic Indian wampum, 2300-year-old Greek artifacts, a real piece of deerskin, and a stuffed owl in a plastic box. And you can supplement these "real" things with film loops, pictures, charts, models, recordings, — and even the directions for building an old Indian trap, using a classroom chair.

Why do it? "Because," says Fred Kresse of the Children's Museum in Boston, "some things just can't be described to children adequately in words. Things like this have to be touched. They have to be seen. They have to be experienced . . ."



Wrapping up parts of the world isn't anything new for Mr. Kresse and the staff at the Children's Museum. They've been providing boxes of intriguing museum items to loan to classrooms for many years.

Lately, however, the Museum's program of developing materials has taken a dramatic new twist. This new focus is called the MATCH (Materials and Activities for Teachers and Children) Box Project, and it has caught the eye of those who propose that there is not enough non-verbal learning going on in today's word-oriented classrooms.

The museum's MATCH Box Project has been supported by a \$188,000 grant from the U. S. Office of Education. Its purpose is to explore new ways of bringing non-verbal learning into the process of education.



Translated into action, the MATCH project has meant the production of a series of boxes containing such items as artifacts, photographs, models, film loops, coins, clothing, and even a set of stuffed birds. Each of the models or "pieces of the world" in a box relates to the study of a single unit. In the "Greek" MATCH box, for example, there are authentic 2300-year-old Greek artifacts, reproductions of Greek statues and coins, a model of a Greek toy, and the plan of an ancient Greek house. Says Kresse, "Materials like these used in a meaningful way can create an impact which words alone could never convey."



The teaching approach used in studying each of the boxes differs. The Greek box, for example, is built around the theme of excavating an old Greek ruin. Pupils are shown a floor plan of the rooms of a Greek house. They are then assigned to groups, and each group is charged with the responsibility of discovering the purposes for which the rooms in the house were used. The artifacts and models in the box are used as clues, and a special booklet of additional facts and questions is used to structure the youngsters' investigation.

Sets of slides on Greece are also included in the box along with a copy of the Greek alphabet so that

pupils can learn to write their names in the Greek language.



But there is far more to each MATCH Box than a simple collection of materials and a teacher's manual. The integration of these materials and the way they have been chosen to "work together" as a unit are crucial to each kit's success. As project director Kresse states, "Oddly enough, the underlying purpose of the MATCH Box project is not to make MATCH Boxes. Instead, we are trying to find out more

## LIPPITT HILL PROGRAM

### Continued

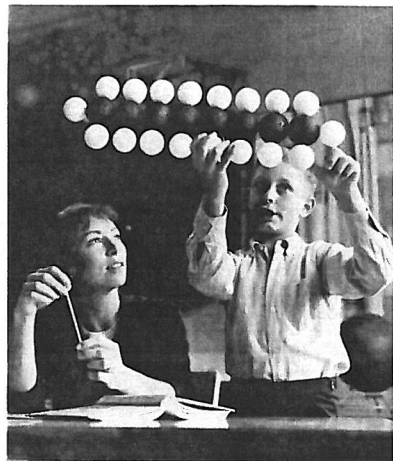
materials. All of these things seem to have helped. We realize, of course, that we can never fill the gap completely, but at least we will have given these children a fighting chance.

What advice would you have for other communities wishing to start a tutoring program?

My first caution would be to "start small" — start with something you can control so you will be sure it can be successful. Secondly, I'd try to involve many different kinds of groups. We feel that our balance between school people, community workers, and college students has balanced out very well. Third, I think it's important to begin with only one college or university. Identify with them and their personnel and then let it spread later if you need more help. Starting with just one institution seems to make things more organized.

Last, and perhaps most important, is to get the support of your teaching faculty. A program like this cannot succeed if the teachers aren't behind it all the way. . . . Let them experiment with the program at first — on a trial basis only. See how they feel about it. Accept their suggestions. This is the key to making the whole thing successful.

I really have to take my hat off to the teachers who are working with the program here. These schools offer them absolutely nothing in terms of good building facilities. Doyle School was scheduled to be torn down eleven years ago. The rooms are old and musty, and the corridors are dark and depressing. Yet the teachers have gone all the way to meet these kids and to help make the program a success. We have nothing to offer or attract these teachers — except the spirit that goes with the school. This is the important thing. I guess you could say that it's the spirit here which has really made our program so successful. ●



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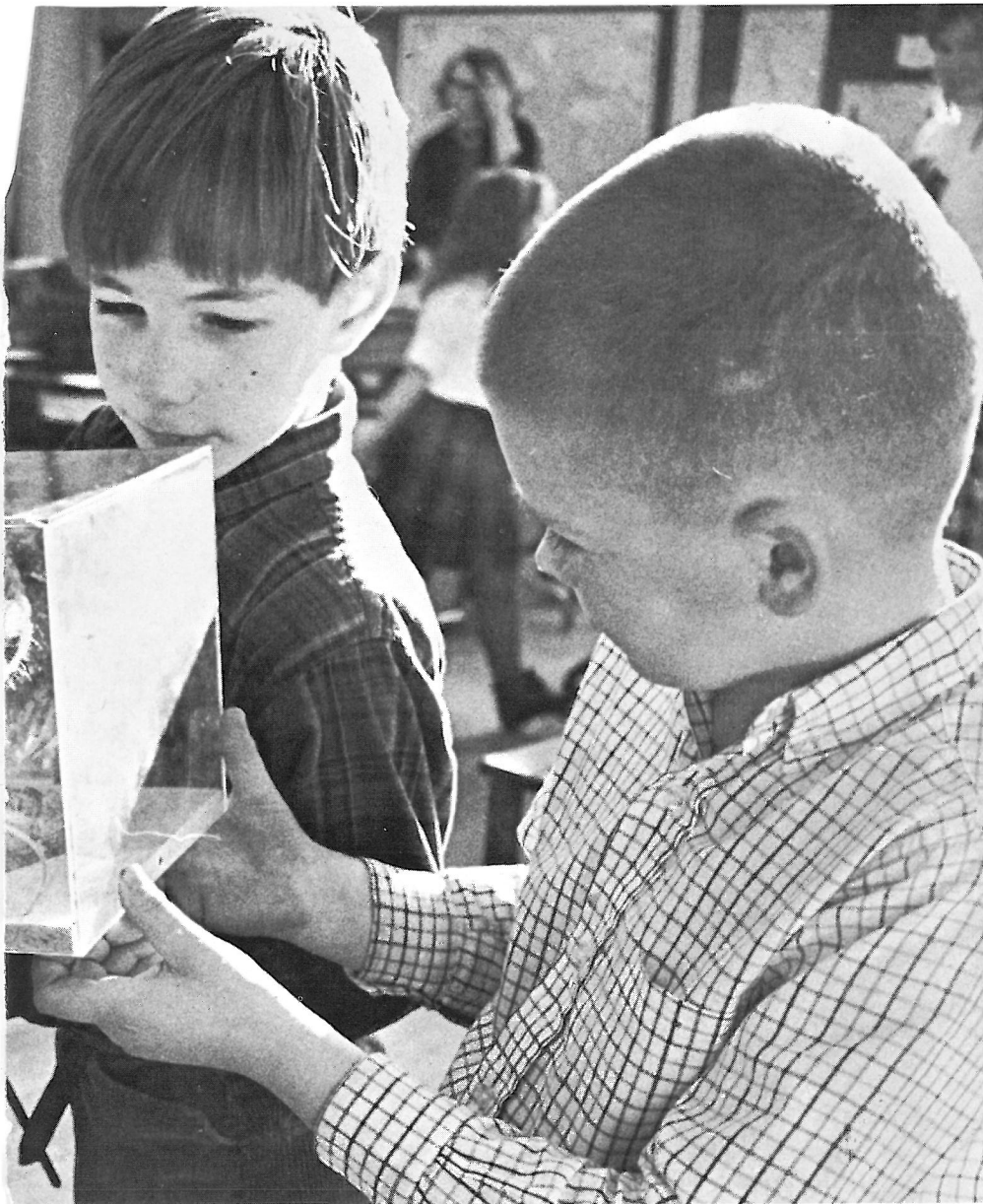


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about the role that real objects play in the learning process, and to discover principles for combining materials and activities into effective teaching and learning instruments."

There are five MATCH Boxes in the first series developed by the Museum: **Grouping Birds** (grades K-2), **The City** (grades 1-3), **The Algonquins** (grades 3, 4), **Seeds** (grades 3, 4), and **A House of Ancient Greece** (grades 5, 6). Each box has been developed by a team of Museum staff members, subject matter specialists, and experienced teachers.

The subject matter specialists have been of special importance in the Museum's effort to make the objects

used in the kits as realistic as possible. "At first," says Kresse, "we thought that all we would have to do to make the boxes would be to assemble items in an 'off-the-shelf' fashion — we thought they would be easily available to us. We soon found out that it wasn't going to be so easy. We've had to do all sorts of strange things to make these boxes. For the Algonquin box, for example, we had to go out and find someone who could remember how to make real wampum from quahog shells. We were told that this was a lost art, but we finally found someone who could do it. In making the Greek box, we discovered that the Greek children used animal bones to

play with, so we eventually found ourselves making trips to slaughterhouses to find the right kind of old bones to boil down and use."



Securing materials for the Bird Box presented similar problems. One of these problems was the matter of packing the birds so that the children could see them from all sides without damaging them. Many different ways of packaging were investigated and tried. The final result was a set of seven birds (robin, cardinal, sandpiper, woodpecker, swallow, hummingbird, and owl) all neatly mounted in clear plastic boxes which could be handled in vigorous first and second-grade fashion without the slightest worry of damage. And, so that the children wouldn't miss out on the experience of actually feeling a real bird and its feathers, the museum personnel included a eighth bird — a duck — which was bravely presented without a plastic box. . . . "Sometimes," maintains the museum staff, "you can learn just as much with your fingers than you can with your eyes."

Subjects for the boxes were chosen on the basis of many criteria. "We wanted a spread of materials to hit different grade levels," notes Kresse, "as well as topics which were relevant to the curriculum. We're not trying to 'reproduce anyone's curriculum in 3-D,' but we are attempting to design the boxes so that they will be generally useful in the elementary school program."



The first five MATCH boxes in the series will be followed by a second set of seven this year, and a third set of four later on. Whether or not the boxes will ever be produced in quantity is still a question. The museum staff has produced only a few copies of each box because of



Project Director Fred Kresse says the MATCH Boxes create a "response explosion" when they are first introduced into the classroom.



Materials in the city MATCH Box include small wooden buildings which children can use to carry out miniature "city planning" projects.



Different types of containers have been tried for each of the boxes. Greek materials are in a suitcase; Algonquin Box (above) is a woven basket.







## MATCH BOXES

Continued

the large expense involved. (Kresse estimates that it costs as much as \$18,000 to \$20,000 to develop and test each original box. Museum officials hope, however, that the MATCH Box materials will eventually be marketed by an educational publisher who will develop a means for mass producing many of the items.



In the meantime, pupils in the schools in and around Boston are having the time of their lives trying out the new boxes and serving as experimental subjects for the development of the kits. Museum officials frequently observe the use of the boxes in local classrooms and follow up on these observations by making appropriate changes in the lesson plans and materials. Teachers in the classes also prepare reports on their reactions to the MATCH Box approach.

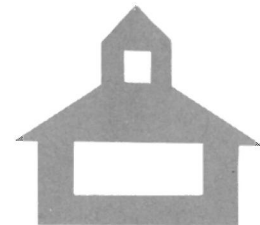
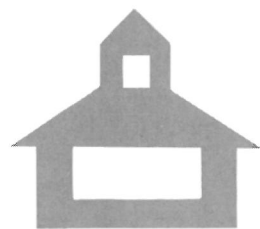
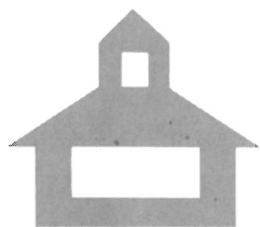
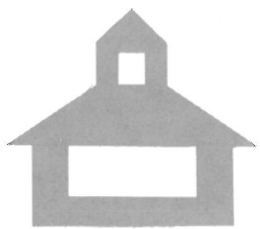
In general, reports Kresse, "the reports are highly favorable. The children really go wild over the boxes. There is an exciting 'response explosion' as soon as the boxes are opened up, and both the teachers and children begin to find themselves communicating in a whole new way.

"When we first started out with this project," Kresse comments, "we were working under the wrong conception. We used to call the boxes 'Material Aids for Teaching Children.' This implied that we were going to arm the teacher with bigger and better tools to stuff more and more learning into children. Unconsciously, we were setting out to design material for teachers to use on children. We soon realize that this negated the very essence and joy of learning and teaching. We now call the boxes 'Materials and Aids for Teachers and Children,' and we are trying to design them to guide both teachers and children in a common exploration and to enlarge the dialogue between them.



"It's hard to express the real essence of what we are trying to create in a box," claims Kresse. "It is a subtle thing. In a sense I guess you could call it 'eloquence.' What we're trying to do is to make a box in which all the elements go together — not just in terms of subject matter — but in some sort of pleasing and artistic way. . . . It's a kind of eloquence in materials, an eloquence in structure, and an eloquence in teaching. We want each box to be something that will bring this totally satisfying experience into the classroom — something that both the teachers and children will always remember." ●

The current school year has been a highly successful one for the New England School Development Council. Its membership has skyrocketed, and its services have been energetically expanded. The following newsfocus profiles NESDEC, and takes a close look at its activities and the probable reasons for its growing success . . .



## **NESDEC: Growing in Service and Scope**

On the third floor of Longfellow Hall at Harvard is a cluster of offices which is fast becoming a vital nerve center in New England education. The offices are those of the New England School Development Council.

There is no wall-to-wall carpeting at NESDEC, and no super-polished secretary to tell first-time visitors that their appointments have just been cancelled because everyone is simply too busy to listen to what they've come to say.

Although NESDEC is nurtured by some of the most revered personalities in New England education, and although it is indeed a frenetically busy organization, it is nonetheless a supremely approachable one. Its business is that of helping New England schools develop and communicate in the finest and fastest way possible, and one of its most important virtues is that it's not necessary to know somebody in the "in" group to benefit from its services.

### **Harvard Based**

Founded twenty years ago by a Harvard professor and a group of superintendents from the six New England states, NESDEC is housed on a gratis basis by Harvard Uni-

versity. It is a private, non-profit corporation supported by the fees of its member school systems and staffed by an Executive Secretary, an Administrative Assistant and numerous clerical personnel.

Dr. Richard Goodman, who assumed duties as Executive Secretary last fall, is a former superintendent from Milford, New Hampshire. Dr. Goodman has been described as "a man who knows how to pick up the telephone and get things done." His administrative assistant, Penelope Strong, speaks of him as an "idea man" who has the necessary determination to put his ideas into action.

### **Membership Open**

NESDEC is directed by an elected Executive Committee composed of eighteen superintendents. Membership is open to all New England school systems, colleges, and other non-profit organizations, at a fee based on a rate of \$.18 per pupil, with a minimum of \$125 and a maximum of \$600. All that is needed to join NESDEC is a letter stating that a school system's board of education has voted to seek membership. The current NESDEC membership shows a roster of 215.

NESDEC's stated goals are "to stimulate more effective school prac-