Teaching architecture in elementary and secondary schools

By Gar Hargens and Bev Anderson

This project has been funded by the National Endowment for the Arts, the Minnesota State Arts Board, the Center for Urban and Regional Affairs/University of Minnesota, and the Minnesota Society American Institute of Architects. © Copyright 1979
Bev Anderson is a special education teacher in the Red Wing Public Schools. Gar Hargens is a practicing architect and consultant for the University of Minnesota’s Center for Urban and Regional Affairs (CURA). Under the aegis of Project Rediscovery, a University of Minnesota program that provides selected Minnesota communities with University students to study community architectural and planning problems and suggest solutions, Bev and Gar created a course for Red Wing sixth graders parallel to that of University students. This broadside presents their goals and methods in parallel format for teachers and planning professionals who may wish to use these ideas in their own community schools.

We are excited about projects that will accelerate public understanding and participation in planning our environment. We hope this summary of one such project will foster many more.

Thomas L. Andring, associate director, CURA, University of Minnesota
James P. Cramer, executive director, Minnesota Society American Institute of Architects

Our purpose is to explain what architectural education can be, how it was taught in one recent school situation, and how you might learn to teach it in your school. Architecture, building spaces that do more than give us shelter, helps define the beginnings of civilization. Architecture education for the public is a recent movement in this country to explain the difference architectural design makes in our lives. Courses and course materials have been developed on this theme under many names: environmental education, the built environment, and architectural education.
ARCHITECT

progress, to name a few. Some teachers have discovered these materials and worked them into their classes. Our concern is that not enough teachers who are aware of their potential may still find it difficult to start using the materials. We think perhaps a personal account of our work might help to show others a clear way.

We have developed this guide as one of the most practical and comprehensive means of communicating to others the differing interests that involve understanding the architect's concern for the environment. Our goal is to add architecture and environmental education to the curriculum of the public schools. We think this work should be of interest to teachers, school administrators, and community leaders who are responsible for the education of the public. We think this work is important and that it should be done in many ways.

I would like to encourage children and secondary school teachers to work with us in developing a curriculum that will involve children in understanding the environment. I would also like to encourage the development of programs for children in the schools that provide them with opportunities to learn about the environment and to work on projects that will help to improve the environment. I would also like to encourage the development of programs for children in the schools that provide them with opportunities to learn about the environment and to work on projects that will help to improve the environment. I would also like to encourage the development of programs for children in the schools that provide them with opportunities to learn about the environment and to work on projects that will help to improve the environment.
ARCHITECT

What are you going to teach? There are good curricula and resources available, and we feel some recommendations here. Some of the best are produced by GES, Group for Environmental Education, in Philadelphia. Both Our Man-Marine Environment and Process of Change have been highlighted for their innovative and student-centered approaches. They are excellent and provide a comprehensive series for educators. We also recommend the National Science Teachers Association, which offers a wide range of resources for teaching environmental education. The Sierra Club and the Environmental Defense Fund also provide excellent materials.

In general, I have found that architecture students are most successful when the designs deal with what the children know or can answer questions about. They need a basic understanding of the buildings and their environment, and I felt that their work was most successful when they designed buildings that the children could understand and enjoy.

In order to study existing buildings and their relationships, we have spent a lot of time in the city itself and in the surrounding area. We have interviewed architects, builders, and residents of the buildings to gain a better understanding of their design and construction. We have also visited the buildings themselves to observe how they are used and how they fit into the surrounding community.

RESEARCH

It is important to remember that buildings are not isolated entities. They are part of a larger system, and their design and function are influenced by a variety of factors. Some of the most important are the climate, topography, and available materials. In addition, the design of a building is influenced by the social and cultural context in which it is located. This context includes the beliefs, values, and traditions of the people who live and work in the building.

In conclusion, the study of existing buildings is a valuable tool for understanding the design process. It allows us to see the impact of design on the lives of those who use the buildings, and it helps us to develop a more comprehensive understanding of the role of architecture in society.

TEACHER

Once sixth grade girls worked particularly hard on this project, writing instructions for each of their models. Several months later, she said she was proud of the project, because it had helped her understand architecture as a career option. She was also interested in the thought process of the architects and how they solved problems. This project was a great opportunity for her to develop her understanding of architecture and its role in society.

Winter in Downtown Brachter Riggs is a city block that is known for its high density of residential buildings. This project required the students to work with architects to design a new building for the site. The architects had to consider the existing buildings and the surrounding community when designing the new structure. The students were able to learn about the planning process and the importance of working with others to achieve a successful outcome.

By working with architects and designers, the students were able to learn about the design process, the importance of collaboration, and the role of architecture in shaping the built environment. This project provided the students with a unique opportunity to gain a deeper understanding of architecture and its impact on society.
gathering exercise on the way to designing something new. For one boy a few years ago, making a three dimensional representation of

Minneapolis in the form of a giant game. Since then the project we could both relate to. In Wayzata we brainstormed about what the new

terrainscapes should be like and later about where the new bridge should be located. These discussions moved quickly into the areas of

compromise and decisions. In Red Wing this year we asked the sixth graders to research different corners of downtown, look at their

design improvements for them. As with their designs for Bay Point Park along the Mississippi River, we attempted to draw parallels between

their downtown designs and those being done by the University architecture students.

This was their first exposure to the University and their projects. When we arrived at the Minneapolis campus we toured the new

underground administration building and bookstore. Then we attended the jurying. The University students' project was to design a children's

museum of architecture. It's a building located near the cathedral, at the base of Summit Avenue in St. Paul. We listened to the presentations and

our own models. The last class involved our own jurying — including a guest juror. Each student presented his or her model and gave a 10-15 minute talk

about the city, the history, the context, the issues. Some cities were very well planned and futuristic. There was an undersea

community and a city built into a mountain. Students included multi-family housing, people-moving systems, and a space shuttle.

This year I missed the guidance and interaction that came with the parallel project. However, our community resources helped make the class

interesting and informative for the students. The process of learning involved creative problem solving, forecasting, planning, brainstorming,

and evaluative thinking. The project in architecture also helped the students understand that they can have a role in planning their

own city.