The utility of a particular citizen participation planning approach as applied to educational facilities planning is described. With the aid of a clear-cut decision-making procedure, citizens could participate effectively in the development of specific planning policy statements. Such statements could be used to discuss planning priorities, focus on policy consequences, and evaluate alternative planning and design proposals. With the aid of simple graphic tools, citizens could themselves produce innovative planning proposals. (Sketches may reproduce poorly.) (Author)
RESULTS OF AN INITIAL FIELD STUDY OF NEW TECHNIQUES FOR CITIZEN PARTICIPATION IN EDUCATIONAL FACILITIES PLANNING

Charles B. Zucker
Research Architect
School of Architecture and Environmental Studies
The City College of the City University of New York
New York, New York

Abstract

The utility of a particular citizen participation planning approach is described when applied to educational facilities planning.

With the aid of a clear cut decision-making procedure citizens can effectively participate in developing specific planning policy statements. These statements can be used to discuss planning priorities, focus on policy consequences, and evaluate alternative planning and design proposals. With the aid of easily used graphic tools citizens can also produce innovative planning proposals.

Introduction

Bond issues for educational facilities are being voted down by school districts across the country. While administrators and planners are proposing new directions in education, taxpayers are becoming increasingly reluctant to accept any program requiring additional tax money. Citizen participation in difficult school district planning decisions makes significant issues more accessible to the voter and provides a forum for the resolution of many educational decisions prior to election day. Unfortunately, some experimental programs which have tried to increase taxpayer participation in planning decisions have not provided for the organizational continuity and depth of involvement necessary to translate words into actual physical change. By not providing a coherent decision-making process which citizens can use in carrying through long range plans, many procedures for broad participation eventually dissolve into uncoordinated planning, a loss of a true relationship between ideas and action and the eventual loss of interest or bitterness on the part of participants. Indeed, one-shot planning sessions for long range issues can create additional barriers to needed educational changes in school districts.

Logistical problems in school district planning require careful deliberation over extended periods of time. With time, and the aid of a decision-making procedure, citizens can effectively participate in developing educational policies and producing innovative school district planning proposals. It appears that a fresh approach to citizen participation is required to involve taxpayers in a productive way with the educational issues and personalities that shape the quality of their schools.

Background

Several unrewarding attempts to work with the familiar advocacy approach with non-profit housing sponsors pointed the way toward alternative and more participatory approaches for providing professional planning and design assistance to community planning groups. An example of one project, which led to the initial hypotheses building for the production of the Planning and Design Workbook for Community Participation by Bernard P. Spring and members of the Research Center for Urban and Environmental Planning at Princeton University, is the 17 acre site in Newark, N.J.:

In 1965, members of the Research Center at Princeton were working as advocate planners for several different housing sponsors in the Newark, N.J. area. One group was attempting to gain control of a triangular piece of land on Springfield Avenue near downtown Newark. The sponsoring group needed a development plan. They had limited seed funds and wanted to know what was possible. As a research center designed to work on design methods
in new ways our group proceeded to develop an exhaustive list of requirements from which a housing sponsor could choose what they wanted to be able to do. The sponsoring group replied to this list with a very wise answer: "We want them all, we want to be able to do all those things."

As advocates we continued to work on the development plan and eventually produced a set of presentation drawings and a list of requirements which everyone agreed they wanted. Unfortunately, in the time it took us to produce the design proposal the political situation had shifted and the 17 acre site was no longer in contention. The new situation left the group with a set of drawings that were no longer of any use. In addition, their seed money funds were used up in the production of the first scheme, and they could not afford to repeat the same advocate process a second time to meet the new context.

The educational benefits of this adventure were very small. During the time we were developing the proposal the sponsoring group was learning next to nothing about the planning and design process. Should the political situation shift a second time and third time they would still be unable to evaluate and change portions of earlier plans that no longer conform to the new political situation. Finally, except for the set of drawings the group had no record of the planning and design decisions. A record of the policies that were implemented in the design proposal could prevent the omission of crucial decisions on revised plans and could also provide a format for public accountability for public agencies, public hearings, and other competing interest groups.

The Workbook Method

As a result of the kind of experience just described the research center began to shift the focus of its efforts toward the development of a planning and design process that could be used directly by citizen groups. The result of the shift in the focus of our work is recorded in the 591 page loose-leaf and open-ended document called the Planning and Design Workbook for Community Participation. This document was originally prepared for the New Jersey Department of Community Affairs as an attempt to provide the emerging Model Cities in New Jersey with an operational model to fill the participation requirements in the Model Cities Guidelines.

The Workbook method is most clearly described in the ten "steps" provided in the instructions to the user. Each of the ten steps is not particularly new. In fact, they pretty much describe the type of behaviors that planners and designers perform day to day. It is the way the steps are grouped and interrelated that make them unique and useful when actually planning for physical changes and carrying out plans into design solutions.

The ten steps are described as follows:

Step 1: DETERMINE ISSUES
What problems do you want to work on?

Step 2: DECIDE ON POLICIES
What actions do you want to take to solve the problems?

Step 3: SET PRIORITIES
How important is each of the actions you want to take?

Step 4: SELECT CATALOG TYPES
How have other groups tried to solve the kinds of problems you are working on?

Step 5: PREPARE A PLAN
How do you want to change the physical make-up of your community and its component parts?

Step 6: ANALYZE YOUR PLAN
How well does the plan you have made meet the policies and priorities you have decided upon?

Step 7: PREPARE ALTERNATIVE PLANS
Are there any other kinds of plans that may be better than the first one you prepared?

Step 8: EVALUATE THE ALTERNATIVE PLANS
How well does each one of the plans you have made accomplish what you want to do?

Step 9: SELECT A PLAN
What plan does your group agree to support?

Step 10: PREPARE A REPORT
How do you tell the people who will help you accomplish your plan what you have decided to do?
There are three basic types of operations embodied in the ten steps of the Workbook method:

The first operation is an open-ended verbal process of defining issues, selecting policies, investigating possible results of policies and placing priorities among selected policies. To perform the verbal operation a community group would be provided instructions, sample issues, policies and policy consequences. (see figure 1 & figure 2) They would also be provided forms which can be reproduced to record issues and policies in the individual style of the community group. The most difficult part of this operation is tied to the ability of any group to discuss the consequences of policy choices that they will make. Even in the best times predictions are not easily relied upon. Expert testimony, reasoned judgments, and the experience of community leaders are the primary tools relied upon to carry-out discussions of policy consequences.

The second operation is an investigation of the kinds of physical forms which might satisfy the policies and priorities which are stated verbally. This operation is usually considered the most fun because it utilizes tools which people with limited planning and design experience can manipulate to produce physical planning or design proposals. In the first version of the Workbook a separate volume and a different kind of physical planning device was used for decisions on the scale of a) the neighborhood, b) the housing site, and c) the dwelling unit itself. During early development stages we discovered that laymen could not easily use these devices for modeling and arranging physical form until they reviewed a catalog of prototypes that the typical professional carries with him in his head as a result of years of education and experience. The development of catalogs showing existing and other innovative solutions for each of the three scales was perhaps the most demanding part of the Workbook production. (see figure 3 & figure 4 for sample pages from the neighborhood catalog and from the housing site catalog)
The need for catalogs of this kind was first discovered when, on several occasions, attempts were made to simulate a community meeting with lay-planners. Gaming the Workbook process is difficult. Real issues and real conflicting interests are required. The need for catalogs of prototypical solutions was identified when it was noticed that without past experience or available references no one knew how to lay-out the first design proposal.

The last operation is a rigorous method described for the evaluation of proposed and existing plans for physical change. This operation is perhaps the key to the usefulness of the method. The complexity and controversial nature of public planning and design today requires that decision-makers keep track of crucial decisions and provide a format for public accountability. Aids for carrying out this operation are provided in the form of charts and "tally" sheets to record selected policies, analyze alternative physical planning proposals, and evaluate alternative proposals by how well the plans match the policies and priorities of the community group. (see figure 5)

Although it is suggested that the first time you try this method you start at step one and proceed in sequence to step ten the following diagram clearly presents the iterative nature of the process in terms of the three operations just described: it really does not matter where you start as long as you complete two cycles.

The end product of this process is a program. This is a statement of the problem to be solved. In terms of the three operations of the method the program would include three items: A list of policies the planning group would like to implement with discussion about the possible consequences of each action; Several diagrams of alternative physical solutions that show how the people, things, and activities that are verbally described should be arranged; And third, a rigorous evaluation of how well each physical solution conforms to the selected policies and priorities.

The first version of the Workbook focused on housing decisions. However, housing construction is not the most popular activity in the existing local New York economy and in the neighborhoods where citizen planning groups are popular. Thus, the first applications of the Workbook method were in the areas of education planning, park and recreation facilities planning, and public financed building evaluation.

Following is a discussion of the Workbook method applied to educational facilities planning:
Application

In November 1969, a Citizens' Advisory Committee was appointed by the Board of Education of Union Free School District #12, Nassau County, Long Island. Given the task of providing the Board of Education with long range and short range plans for the school district the Committee began a long series of meetings. After approximately twenty meetings the Committee had produced only limited short range results. Long range planning was hampered by the lack of a planning strategy, difficulty in clearly identifying and stating planning issues, inexperience in the production and use of drawings, and some confusion over what the Board of Education expected. In an effort to find the kind of professional help needed to assist the Committee to make plans, the Superintendent of Schools asked the Educational Facilities Laboratory for aid. At this time members of the Research Program at the City College were invited by E.F.L. and the Superintendent to provide instruction in the use of a planning process for structuring policy decisions, instruction in the use of 'graphic aids' for producing maps and planning proposals and related data collection assistance necessary for decision making.

Several meetings were held between the Board of Education, the Committee, and the Research Program prior to our first work meeting. In the first week of June 1970 we held our initial orientation meeting. The Workbook method was described in detail with the aid of slides and demonstrations of the planning tools. In turn, we were given a review of why people needed to make plans in School District #12.

The school district boundaries enclose portions of three different municipalities:

Malverne, an incorporated community, predominantly white, includes one shopping street and a train station;

Lynbrook, an incorporated community, predominantly white, includes a new public library;

Lakeview, an unincorporated community, predominantly black, includes a new swimming pool complex and boarders a large municipal park.

(see figure 6)

Median income in all three communities is in the middle to upper-middle income range. The quality of housing high: ¼ to ½ acre lots with single family detached houses made of brick and stucco in the Malverne and Lynbrook areas and post-war ranch style in the Lakeview section.

Five school buildings are owned by the school district: Three elementary schools, one in each district; one high school and one junior high school. The two upper schools are located in the geographical center of the school district. This location is one mile from the district's furthest boundary. The quality of the school buildings, like the quality of the housing, is relatively good. The elementary schools are the oldest buildings of the five. The junior high was originally the high school, and the high school is almost new. Each building needs minor renovations and other short term changes, but these were not the planning issues the Committee had difficulty in defining.

School District #12 was an early test for Supreme Court school integration laws in New York State. In June 1970 the school district was in a relatively quiet period after a battle over integration requirements that started in the early sixties. Student bussing and the distribution of the elementary school children in the district was the stuff that made the content of most of the long range planning issues.

Several student distribution plans had been attempted by the School Board to
balance the elementary school population in the school district. For three years, prior to 1967, the school district was operating under the so called Princeton plan or the 4-4-4 plan. This plan was instituted under a mandate of the past State Commissioner of Education Allen. To implement this plan state subsidies were required for cross-town bussing expenses. In time the cross bussing became unsatisfactory to a majority of the community and the plan was changed.

In its place the School Board decided on a one-way bussing plan. To accomplish this plan the school in the Lakeview section was closed and turned into a daycare center and offices for school district administration. Relocatable units were rented with state aid and placed behind the two elementary schools in the Malverne and Lynbrook sections. The new relocatable units covered the demand for classroom space equal to the square footage in the unused Lakeview school. (see figure 7)

![Figure 7](image)

The planning committee was a good example of community opinion. Each member of the Board of Education appointed one representative for a total of nine. After the first orientation session the Committee invited members of other community organizations in the school district to become voting members. The total number of committee members remained stable at about 15 people.

From the first working meeting the group was obviously divided between the pro-neighborhood advocates and the pro-central complex advocates. Both parties had problems with looking at the component parts of the centralized school or neighborhood school issue. A difficult tactical problem was addressing this issue without the blunt stabs at solutions that had been made in the past, and were clearly being made by members of the planning committee.

Most of the research effort was used to translate minutes of current meetings into clearly stated planning issues for discussion at following meetings. This task included identifying sample policies for each issue and tracking down support data for each alternative policy. This approach worked well for the early meetings. When substantive issues were in debate the procedure was slow. Eventually, seventeen issues were raised and policies were selected. The issues are listed as follows:

Issue 1: Who will participate in planning the educational activities and facilities in your community?

Issue 2: What type of communication links should be set up with the Board of Education, teacher organizations, P.T.A., and other community groups?

Issue 3: What time schedule should be established for reporting planning decisions?

Issue 4: What work schedule should be established?

Issue 5: Do you want to plan a school system that will serve a larger or smaller number of students? (see figure 8)

Issue 6: What activities do you want to plan for first? (see figure 9)

Issue 7: Are there any activities which you wish to increase or decrease in existing neighborhood school locations? (see figure 10)

Issue 8: Are there any activities which you wish to increase or decrease in the existing central school locations?

Issue 9: How do you want to group students, and where should they be located?

Issue 10: How far should students travel to get to school?

Issue 11: Do you want to keep relocatable classrooms? (see figure 11)
Issue 12: Who should use the relocatable classrooms?

Issue 13: Where should relocatable classrooms be located?

Issue 14: Who should fifth graders go to school with?

Issue 15: Should the Woodfield Road School (Lakeview) be open for classes?

Issue 16: Should neighborhood school sites be sold or leased for other uses?

Issue 17: What type of classroom space is desired for educating students in this school district? (see figure 12)
Policy resolutions to the 17 issues did not just happen one right after the other. During the third and fourth work meetings it was obvious the committee had become weary with words. They wanted to make plans for physical changes but they were tired of talking. The focus of the planning was then changed from using words to using a planning tool to diagram alternative distributions of students and facilities. We would return to the issues and policies at a later time.

A very simple diagramatic catalog of sample arrangements of students and facilities was distributed to the committee members. The committee members quickly adapted this new approach and proceeded to produce alternative proposals.

The tool consisted of two pieces of plastic sheets each 30" by 30". These were taped together on one edge to open and close like a portfolio and make it possible to stand as a triangle on a table or chair. Attached to one of the surfaces was a thin piece of cardboard with a thin sheet of metal laminated in its middle. On top of the cardboard several maps were attached with paper clamps: a street map, a vacant and public land map, and a land use map. The movable parts of the tool were various shaped flat pieces of rubber coated magnets. Each small round magnet represented 20 students in a particular grade from kindergarten through 12th grade. The larger square, round, and triangular magnets represented 2,500 sq. ft. of one of the following activity categories: (see figure 13 and 14)

Regular teaching:
This category includes activities for groups of 2 to 30 people. Activities in this category do not require any special equipment to function. These activities include: social studies, English, math, etc.

Special teaching:
This category includes activities for large groups of people or activities that require special equipment or personnel. These activities include: home econ., language labs, science, art, music, shop,

Recreation:
This category includes the following activities: playing indoor sports, apparatus storage, showering and storing clothes, etc.

Eating:
Activities in this category include: eating in a cafeteria or class room, cooking, washing, storage, etc.

Administration:
Activities include: clerical work, lounging, storage, guidance counseling, custodial duties and storage, etc.

Transportation:
Activities include auto parking, bus parking, bus routes, pick-up, bus maintenance, etc.
Using the planning tool at the early meetings seemed to provide the planning committee with an incentive to produce and discuss alternative solutions. By rearranging, adding and subtracting magnets, and quickly photographing the results and recording the data the committee began to ask more in-depth questions about their basic split over the central complex or neighborhood distribution issue. Within three meetings the committee had developed all the strategic planning alternatives they could think of and were looking for a way to sort out the alternatives they wanted to study in depth.

Once again we shifted gears and returned to the verbal problem of identifying issues and selecting planning policies as a way to develop our criteria for evaluating the thirteen alternatives developed with the planning tool.

Eventually, three solutions were selected for presentation to the Board of Education. Even with the aid of evaluation forms the evaluation process was difficult. A January 1971 deadline was quickly approaching and our grant money was running out. In addition, a consensus among the committee was not always possible. Members of the committee would disagree on the importance of a specific policy or the feasibility of a part of a particular solution. The tactic that was finally adopted to progress with the evaluation was to include a majority and minority report. This tactic worked on two levels: First, a consensus was taken of the group on any planning decision. If dissent was known the dissenting members would record their preferred policy and produce their own list of criteria. Second, when the first, second and third choice plans were selected the minority opinions for the second and third choices were included in the text of the final report.

Of the three plans for future development, the proposal shown in Figure 15 is the one most preferred by consensus of the members of the planning committee "given the resources and the support of the community."

By implementing this plan the planning committee felt that residents in the school district would derive benefits from a decreased bussing budget through shorter travel times and shorter bus routes from cross-town locations to this central "educational campus."

The language had tempered considerably from the early meetings. For example, the committee agreed that the "strength of any new proposal for new construction is closely tied to a reasonable and profitable sale or lease of the three neighborhood school properties. Particular attention must be paid to the sale or lease schedules and design, construction and student relocation schedules..."
The third plan was the result of trying to find a money saver scheme. (see Figure 17) This plan takes into account the possibility of making the temporary classroom units more permanent by applying a fire-resistant facade and replacing other fire risks with more reliable materials. The cost of moving the relocatable units from their locations behind the two neighborhood schools and the high school to this new central location would have made the initial costs very high without the additional renovation costs. This scheme was quickly overshadowed by schemes one and two.

Our last meeting was on the 5th of January 1971. The planning committee was provided with the final copy of their planning decisions. This 26 page report included a list of their issues and selected policies along with diagrams and descriptions of the three planning proposals. In addition, they were provided with a 300 page appendices that included the minutes of all meetings, all working documents and sample materials, a vacant and public land survey, and related statistics on the student population and the five school facilities.

Discussions between the Planning Committee and the Board of Education in School District 912, Nassau County, Long Island are continuing.

Conclusions

Some comments about the methodology, the content, and technical assistance seem required at this time.

First, the method: The idea of laymen completing three operations involving highly technical material and requiring much patience and perseverance appeared impossible in the beginning. But as the committee began to find their legs after working through the issues and policies, working with the tool, and having a product to evaluate and a way to evaluate it the flexibility of the method became more useful. We could switch from developing physical plans to discussing highly detailed renovation issues, for example. We could clearly state what the problems were and what our solutions would be.

The problem areas defined by the seventeen issues are a reflection of the make-up and temperament of that particular committee. Other issues could have been discussed. For example, the teachers on the committee were distressed that more "real education" issues, like issue 17, were not raised. In the original version of the Workbook three different scales are available for planning decisions. This planning effort would have followed the same lines; the first step was the school district, the second would be the school site and the third the classroom itself.

And finally the role of the technical assistant: Without assistance to guide discussions when they bog down, to provide the necessary data collection service, and to act as the mainstay in long term planning efforts citizen participation efforts of this kind would provide little aid to people who want to have a choice about how their environments are changed.

Notes:


In the near future the results of a user survey will be available from Lance J. Brown, School of Architecture, Princeton, N.J.

For additional information on the use of the Workbook for Park planning or Building Evaluation contact Gordon A. Gebert or Carmi Bee, School of Architecture, the City College, 138th St. and Convent Ave. N.Y.C.