AN EXPERIMENT IN ENVIRONMENTAL EDUCATION FOR CITIZEN ADVOCATES

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ABSTRACT: The paper describes a prototype of a college level adult-centered environmental education program. The target population is comprised of citizens who serve as volunteers in local planning boards, conservation commissions and environmental organizations. The educational model embodies the concept of the "double flow". Citizens with extensive community experience are enrolled in university courses while graduate students are brought into community organizations as interns. Program effectiveness is evaluated with regard to course content, mixing of citizens with regular university students, and motivational factors related to the issuance of academic credit.

The responsibility for the quality of the natural and man-made environment is being undertaken in a significant way by citizens through their active roles in a wide array of environmental organizations, public-interest groups, city and town planning boards, and conservation commissions. These citizen environmental advocates assume important and complex public functions and responsibilities, characteristically, for no pecuniary motivation. As the process of citizen input in public policy becomes more institutionalized and pervasive, citizen advocates are beginning to form a distinct estate in society

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in juxtaposition to municipal government, the business and financial sector, unions, and the passive voting public.

A growing number of state and federal programs must show compliance with standards set for citizen review and participation in the planning process. The trend is to replace traditionally elitist planning and decision-making strategies with those that offer great citizen involvement. For the citizenry to be effective, they must have access to information and understanding of the public decision process in its formative stages rather than simply review already made decisions. However, for those who become involved in these activities there are no training programs, no standards of competence, and no established body of knowledge that qualifies them. Indeed, their main qualification is the fact that they are nonprofessionals in the field and can be representatives of the lay public. Consequently, these citizen advocates often lack knowledge about decision process and lack understanding of technical questions that bear upon their work. Nonetheless, they are increasingly called upon to make critical value judgments that are highly dependent on technical information.

In 1975-1976 Tufts Graduate Program in Urban Social and Environmental Policy undertook a project to develop and implement a prototype educational program for the citizen environmental advocate. The program design was developed on the assumption that success as policy advocates is largely contingent on the training, experience, and self-confidence of the citizen. During the first year an evaluation of the educational effort was carried out that was intended to find answers to several critical questions, namely:

- 1. Was this educational model a satisfactory one?
- 2. How did (if at all) this continuing educational model contribute to making the citizen environmental advocate more effective in his/ her role?
- 3. Can an educational program for activist citizens be assimilated into a traditional university setting?

That last question was of special concern to educators as the university with its wealth of human resources was a most important locale for offering such courses in the future.

PRELIMINARY QUERIES AND HYPOTHESES

A number of questions about the program design emerged at the outset. A set of working hypotheses to deal with these was developed by the project staff and was subjected to careful scrutiny in the evaluation. The following are prominent among the early expectations held by the project coordinators about this special group of adult students.

- 1. Citizen advocates would be concerned primarily with developing techniques and strategies that they could take back and apply in a direct and immediate way to their community problems.
- 2. Citizen advocates have sufficient field experience in their backgrounds and are likely to want a traditional classroom experience.
- 3. Citizen advocates could be integrated into courses with regular graduate students and advanced undergraduates without diminishing the academic quality of these courses despite the fact that these citizens are not enrolled for course credit.
- 4. A careful interview process for candidates applying to the environmental advocacy training program and a selection in favor of those strongly motivated in broadening and deepening their environmental understanding would minimize the dropout rate.

The form and content of the curriculum were developed with these conjectures in mind.

WHAT IS AN EFFECTIVE ENVIRONMENTALIST?—THE HARD LINE vs. THE BALANCED VIEW

One of the critical questions in the design of the curriculum centered around the issue of what is an effective environmental advocate. Since a principal objective of the educational prototype was to increase the effectiveness of citizen environmental advocates, the issue had to be resolved before the substance of the curriculum was decided and before the evaluation could be structured. There were two opposing positions—the radical environmentalist position and the liberal academic view. In the former it was held that the curriculum should provide the citizen advocate with better tools and a better understanding to win the struggles on the side of conservation in decisions related to air and water quality and zoning as examples. The latter view held that the traditional approach to environmental issues was one-sided and neglected the larger social and economic systems and objectives such as social justice and the efficient utilization of scarce resources.

A balanced curriculum on environmental issues could serve two

purposes. By requiring committed environmentalist to examine and explore the reasoning behind the opposition's arguments they would have a stronger base for understanding the controversies. In addition, they could improve their effectiveness with additional conceptual ammunition for handling debates. On the other hand, that approach could also provide citizens with a more judicious look at specific dilemmas and force the environmental advocates to reexamine their "hard line."

The balanced approach we also seen as more suitable for a liberal arts institution. The question remained, however, of whether such a curriculum would do justice to environmental advocacy when, as one individual argued, the environmental groups are far outweighed, outnumbered, and outfinanced by their opposition.

The outcome of these debates was important. The program as implemented reflected the balanced approach. Instructors for the courses were mixed in their personal views about environmental issues: some embraced the "hard line;" others were especially responsive to the social and economic consequences of radical environmental decisions. The program design underscored the fact that it was not a sectarian training project but rather a curriculum integrated into a liberal arts university. While participants may have entered with a special mission, strengthening the mission per se is not the concern of a liberal education; rather it is the critical exploration of the sources of and claims for knowledge and the development of a consistent and coherent set of objective values.

THE EDUCATIONAL MODEL

Profile of the Advocacy Fellows

Thirty-nine people from the greater Boston area were selected to participate in the program. They represented conservation commissions, other local agencies, and public-interest groups. They were selected from a variety of geographic locations and municipalities. Their educational backgrounds varied substantially. Of the Fellows, 13 had only high school diplomas, 2 had associate degrees, 2 had completed nursing school, 17 had baccalaureate degrees and 5 had master's degrees. The 12 men and 27 women ranged in age from the 20s to the 60s. Half were employed fulltime, though many of those employed had jobs with flexible hours. Participants came from as far as 40 miles and traveled as long as 1 1/2 hours each way to attend the courses.

It was anticipated early in the project that a fair percentage of the

citizen participants were likely to come from city and town conservation commissions. Because of recent wetlands protection legislation in Massachusetts and state and federal environmental impact review legislation, the Conservation Commissioner was taking on an increasingly responsible and technical role. Other citizen participants were sought from state and regional advocacy groups such as Zero Population Growth and the Sierra Club. These are people involved with litigation, lobbying, public education, community organizing, and, in the very broad sense, the influencing of public policy.

Educational Vehicle

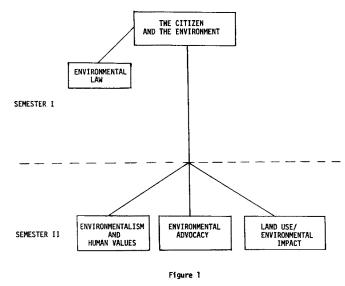
The environmental education model was comprised of three principal components: (1) the core curriculum (2) an environmental forum, and (3) student internships.

The curriculum. Once the type of advocate and the specific objectives of the program were fixed three elements of the curriculum followed quite naturally. These initial objectives were:

- 1. To provide citizen advocates with a first order comprehension of the nature and scope of environmental legislation and its effect on their communities.
- 2. To help the citizen obtain better skills in his or her role as advocate and as such to bring to bear on the established power arrangements the concerns and values of those outside the network.
- 3. To help citizens become acquainted with the tools, techniques, and values of the planner while becoming familiar with the full scope of the EIS process and other decision-making processes where citizens have roles.

The initial curriculum consisted of five courses (see Figure 1). Three of these were chosen to meet the previously stated objectives and were appropriately entitled: Environmental Law, Citizen Environmental Advocacy, and Land Use Planning/Environmental Impact. A fourth course entitled, The Citizen and the Environment served as a microcosm of the curriculum by surveying a wide range of issues from ecology to advocacy through a series of lectures offered by academics and practitioners.

For the final course we provided a test of our original conjecture that advocates would respond best to the technique-oriented community relevant curriculum. This final course, Environmentalism and Human



Course Offerings for Citizen Environmental Advocacy Program: Stage I

Values, examined the broader political and social approaches to environmental policy and the underlying value framework of certain paradigms and ideologies that offer an analysis of environmental conflicts. The rationale behind offering such a course was that it would help advocates develop new sensitivities about the relationship of their community values to national and global concerns and that it would place the value issue in the forefront of discussion rather than obscure it behind the agenda of community politics and implementation. While this course did not provide advocates with tools or techniques in any traditional sense, it raised the critical value of issues and helped divert the participants from single-minded pursuits of conservation goals.

One of the objectives of the project was to test how well an educational program designed for citizen advocates could be integrated with a regular academic program. One hypothesis was that citizen advocates require something different out of their educational experience than what is expected of regular university students and furthermore that mixing the two types of students in classes would diminish the effectiveness of the courses for both groups. Another view held that the mixture of student types would be beneficial to both groups. This latter position rests on the cross-fertilization argument. Citizen advocates bring a rich assortment of personal experiences from their community activities, and this combined with a strong motivational factor, can overcome any shortcomings in their academic background. With these strengths advocates can serve as valuable participants in class discussions, a counterpoint to the less experienced younger student whose more polished analytic capability and familiarity with the literature provide the advocates with an intellectual stimulus.

As the program evolved, citizen advocates were not required to perform academically at the same level as regular students. One could still have mixed courses and anticipate that motivated citizens who entered the program more for its intrinsic worth than for the extrinsic reward would seek their own level—an academic level comfortable to them and one that conforms to the time that they have to expend in reading assignments.

Another issue was whether the citizen advocates would be threatened or uncomfortable in a mixed student environment. Consequently, to observe such effects two of the courses (the Citizen and the Environment and Land Use/Environmental Impact) were limited to Advocacy Fellows exclusively, while the other three courses had a mixture of regular undergraduate and graduate students. The results of teaching in the mixed and unmixed classes are discussed in a later section of this article.

The environmental forum. The curriculum has built into it a public forum on an environmental issue of current community concern that brought together citizen advocates, public officials, and academics in workshop formats. The educational function of the environmental forum was to offer the citizen advocates an opportunity to participate in a public policy formulation process while concurrently helping the broader community to understand the dimensions of the issue in question. During this forum advocates try out some of the techniques and skills they developed in their academic setting while witnessing a multifaceted examination of a problem through a diversity of participants from the public, private, and academic sectors. As an educational experience, the forum simulates what many advocates will be doing after they leave the program, namely, participating in town meetings, conferences, or legislative hearings. The forum underscores the importance of creating opportunities for citizens to define problems, articulate positions, and develop arguments.

Student internships. A third key component to the program established an internship for graduate students in agencies or organizations that had sent a participant to the program. This

functioned to strengthen the ongoing professional master's degree program in environmental policy while simultaneously helping the advocacy organization with professional help for which it could not afford to pay. Students benefited by getting on-the-job training and the challenge to face real world problems. Internships included working on open-space plans, implementation of the wetlands protection act in Massachusetts, land use planning for an inner urban community, and planning for the improvement of an urban river basin.

RESULTS OF THE EVALUATION OF THE CITIZEN ADVOCACY PROGRAM

The evaluation of the educational program was carried out through a combination of techniques. Questionnaires were filled out by the participants prior to beginning their studies and after completion of each of their courses as well as at the end of their program of studies. The initial questionnaires were designed to assess their state of knowledge of environmental issues, their self-confidence, expectations, and ability to articulate community issues. Final questionnaires assessed their attitudes toward individual courses and problems that they faced in attending classes and completing course assignments. Individual faculty members provided information about students' performance and the feasibility of the student mix. Finally, an open taped discussion of citizen advocates and the project staff was designed to elicit unexpected reactions and allowed evaluators to obtain a deeper understanding of what had occurred during the advocates' course of study.

Response to Course Content

While the evaluation reinforced some of the initial conjectures, it also showed some surprising results. From course evaluations, attendance figures, and class discussions it was learned that citizen advocates responded remarkably well to the conceptual and philosophical content of the courses. It was especially noted in the evaluation that the learning most appreciated concerned fundamental ideas, conceptual models for the comprehension of the socio-political scientific reality, and the critical reexamination of their own values and perspectives. As such, citizen participants were especially responsive to the opportunity to examine a holistic systematic approach to the environment, one that sought to weed out the value priorities, to show where the incongruities were and how one could develop a coherent perspective on the issues.

These results of the evaluation on student response to course content must be viewed in the context of three mitigating factors.

First, since the citizen advocates had a choice among several courses and they were advised on the content and the time commitments involved, in effect there was a certain degree of self-selection operating. The students, after arranging themselves in the courses of their choice, were more likely to see those courses in a positive light.

Second, it is not unusual for students to respond more favorably to what faculty do best; consequently, some portion of the positive responses of advocates to the curriculum could be explained more by the kind of faculty chosen to instruct the courses than by the kind of courses offered.

Third, the interest of the advocates in the specific curriculum offered leaves open the question of whether these same students would have responded favorably to a different kind of curriculum. There were noncurriculum-related factors in their responses that could not be isolated. Students may have simply been excited by having been introduced or reintroduced into academe and would have been pleased by a wide range of courses.

Course Credit and Motivation

In the first year of the pilot project citizen advocates could not receive credit for their participation in the program whether or not they were capable or likely of completing the academic requirements. The rationale for the decision was that by offering academic credit for participation in the courses the admissions committee would begin screening for candidates with substantial academic backgrounds. However, such individuals could normally find programs to meet their needs elsewhere. It was the aim of the project coordinators to attract citizens to the program who were outside the network of traditional academic resources and were unlikely to pursue academic training—at least prior to their involvement with the citizen advocacy program.

Another reason for deciding against credit was to avoid the professional student type and to attract people whose primary interest was in what they were learning and in how they might use it to enhance the quality of life in their community.

The evaluation results were mixed on the question of credit. Several

students indicated in their evaluation that offering credit would have changed the spirit of the program, in that working for course credit would have hampered the learning process for them and would have attracted more career-oriented and less public-minded people. Other citizen advocates who thought credit should have been awarded maintained that it would have motivated them to complete their projects. Those who did the equivalent work of regularly enrolled students saw the lack of credit as unjust. A number of the citizen advocates were or became interested in obtaining an advanced degree and wanted to apply their courses toward this goal.

At least half of the participants saw the issuance of credit as inhibiting their freedom to experiment with the program and to explore those areas that most interested them. They perceived that the same program under credit would become too rigid and inhibitory for students to seek their own level of commitment, which can vary from course to course. However, by the end of the program it became evident from attendance figures and the levels of weekly preparation that a majority of the students were sufficiently motivated by concerns other than academic and career placement so as to justify the non-credit policy.

Mixture of Advocates and Regular Students

One of the objectives of the experimental Citizen Advocacy Program was to investigate the feasibility of mixing adult students with regular university students, both upper level undergraduates and graduate students. Of the five courses offered, three experimented with the mixed enrollment. In one of these, Citizen Environmental Advocacy, nothing could be learned about the mixing since too few members of the course were regular students for the mix to have an impact. In the two courses in which there was substantial mixture, the general response in both students' and instructors' evaluations was that the mixture at most enhanced class discussions and at least did not detract from them. Advocates were able to draw upon local issues from their community experience to illustrate concepts or raise objections. A minority of regular students felt, however, that discussions stimulated by the citizen advocates were too particularized and of little generic concern.

The courses where mixing proved to be most successful were primarily of a broad policy nature where overriding value issues and environmental conflicts were emphasized. One instructor who taught concurrent courses in land use planning, one for citizen advocates, and the other for regular students felt strongly that the courses should be kept distinct. Advocacy Fellows for the most part, in his view, were not equipped to handle the technical planning concepts and strategies as easily as regular career-oriented students.

Response to Pedagogy

A variety of teaching methods and styles were used in the five courses offered. They ranged from structured lectures presented by one instructor, to more informal open discussion, to a series of guest lectures. Participants preferred courses that were not fragmented, that did not consist primarily in lectures by a variety of different outside speakers. They enjoyed the continuity of an instructor tying components of the course together and offering a method of analysis or an ideological position.

The courses did not offer any field work, and the advocates, even when asked, did not express a demand for it. The citizen advocates did feel, however, it was important to relate each course that they took to an objective or concrete project on which they worked in their community, whether land use policy, recycling, or energy policy, insofar as this was feasible.

The evaluation revealed that one of the more valuable educational experiences for the citizens was a project in one course that required their writing a problem definition on a subject of special concern to their community or their advocacy experience. Their papers were developed in stages, critiqued, and rewritten. The process emphasized skills in organization, communication, and the process of inquiry. In a number of instances this project started advocates off on longer term projects of their own.

Program Completion

Geographical heterogeneity was a factor in the selection of citizens for the program. Travel distances, as a consequence, were high for some—up to 2 hours each way during inclement weather. There was also no penalty for dropping out of the program since citizens were not graded for courses and grades of incomplete were not kept. Thus there were considerable hindrances to completion for some and without some of the usual incentives to attend class.

Of the 39 citizens enrolled, 9 dropped out by the end of the first semester. Most of those completed their first semester's course requirements. An additional 4 participants stopped attending sometime during the second semester. Students attributed dropping out to winter travel problems, illness, increased advocacy responsibilities, or an interest in first-semester courses only. All but 2 of those returning questionnaires at the end of the program said they would take it over again. Of the 2, one was dissatisfied with the lack of technical content and the other felt that the courses were biased.

Modifications to the Program

In response to the evaluation, a number of modifications to the first year's curriculum will be introduced in the second year. A gap in the program noted by some of the Fellows and the instructing faculty was in the areas of ecology and environmental technology. To meet this need, the program will offer a course that introduces the advocates to the science of ecology and surveys, the monitoring and engineering aspects of environmental technologies, including waste-water treatment, air quality, noise, food production and distribution, work-place environments, and alternative technologies. The original survey course was considered of lower priority by students and instructional staff and was deleted from the program.

By the time they joined the program, most of the Advocacy Fellows had been out of school for five years or more. Their writing skills were weak. They had difficulty completing written projects. Consequently, more effort will be devoted to helping advocates develop written communication skills through special projects and advising. The objectives will be to help them to identify and articulate problems and data needs and to organize their thoughts and arguments in an effective written format.

Advocates will be encouraged to coordinate their outside work in different courses through a single extended paper or project. This has several advantages. First, it will save the advocates time if they build upon one problem in their community, examining it from a number of disciplinary perspectives. Second, concepts are taught more effectively when connections are made from one area to the next. Third, our experience indicates that if these adult students can work on projects of immediate concern to them and their advocacy organizations, they have substantially more incentive to do the work.

CONCLUSION

After a one-year trial of this program it seems clear that there is a special demand for nondegree education for adults that can be related to their participation in community groups and advocacy organizations. It is feasible to mix adult citizen advocates and regular students in the university in certain kinds of courses at least. Some benefits exist in the cross-fertilization between the practitioner adults in the advocacy field and students at the university. Advocates in this study responded favorably to courses presenting a holistic and multisided examination of environmental issues. This study found that adults who have extensive experience in local issues welcomed courses that showed them the connection of their local problems to larger socio-economic conditions.

The effectiveness of future avenues for citizen participation, undoubtedly, will depend, in part, on the availability of appropriate educational opportunities for citizen activists. The environmental education program designed by Tufts Program in Urban Social and Environmental Policy is one prototype that might be considered by colleges wishing to broaden their student body while at the same time making long-term and potentially valuable contributions to the quality of life in the surrounding communities.