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ABSTRACT

Additional insight into the High School Geography Project (HSGP) is provided by this retrospective view of the critical decisions which influenced its nature and scope. A commitment was made to materials at the expense of teacher education and other changes in the educational system. Successive choices focused on a complete but frugal package of teaching materials for a one-year course with a 30% overrun for fast teachers. Timing constraints dictated a "Dive in, do the job at the present state of the arts, and get out" approach, with no effort to do further research or maintain and expand a bureaucracy beyond completion date. The decentralization of the creative work among unit authors allowed for variety and ingenuity, while centralized evaluation and editing provided coherence and consistency. Commitment to teachability was protected by school trials with representative teachers; little attempt was made to accommodate the bottom one-third of American high school students. Evaluation was pragmatic--Did it work? Was it liked? Commercial considerations were not primary, but remained constant. The project outline occupied a large share of initial attention, but proved to be a flexible and valuable guideline. HSGP broke from tradition as far as possible, retreating to a more conventional approach when necessary. (Author/JLB)

DISCOVERING DECISION TREES IN THE CURRICULUM JUNGLE: A CHRONICLE OF GROUP GROPING

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April 1970

If this paper sounds more like a memo than a scholarly tome or proper poetry, it's partly the time constraint within which it is being written. As the High School Geography Project nears completion, it does seem worthwhile noting what appear to be crucial decisions made by the Project, crucial in the sense that they influenced the whole set of products. As we groped along the path of curriculum development where did we come to the forks in the path? How did we make the decisions? What are the implications of those choices? Is there some important territory down those other paths which really should be explored?

Many of the decisions were made by the earlier two phases of the Project before NSF financing, and some were almost constraints imposed by the Foundation. But many of the alternatives were debated actively by the Steering Committee or the staff or both. In a few cases, we slid by, unconscious of our options or happy to pretend that we did not know about them.

The "Materials" Approach

Clearly one of the earliest decisions was the choice of a "materials" approach to curriculum change. Of the many parts of the educational system, all of which are subject to change, HSGP would concentrate on curriculum materials. This was an apparently happy coincidence of

the thinking of the group who rewrote the proposal in September, 1963, and the constraints of the Course Content Improvement Section of NSF. By that time, it was already clear that we would try for a one-year course and that we would begin to produce more or less immediately.

Two years of exploration, cogitation and gestation preceeded this formalization of the choice. That first proposal committed us to choosing an outline (or several) for a one-year course. The integrity of the one-yearness of it was open for awhile. Should the final product be hardbound as a year long course? Should we try a one semester version? In the fall of 1964, the idea of a smorgasbord of 14 units from which the teacher could choose was rejected. The dignity of the subject demanded sequence and school adoption policies favored a full course offering. In the next year and one-half this decision was partially reversed. A year long course was planned, to be sure. But the individual units would be available for separate purchase. This reversal must have firmed up in the spring of 1966. By this time all the unit authors had been selected and it was clear we were not writing to a carefully sequenced series of ideas. Attractiveness and flexibility would both be served in publishing unit by unit. Only the ability to build one unit on another was sacrificed and it had already been lost by the unit author selection process.

(A year or two later, the value of sequential learning experiences, as against simply episodic learning experiences, was challenged in the educational press.)

Timing

Timing decisions were influential at several places in the Project. The "begin more or less immediately" was built into the first NSF proposal. The invitation to submit prospectuses to write the first urban unit went out in June, 1964, months before the Project Office was re-established in Bozeman. Already it was clear that there would be relatively little effort spent on: "Where does this fit into the ideal curriculum?" and, "What should be the geography sequence K through 12?" Neither were we allowing much time for training geographers in curriculum design or curriculum specialists in geography. If we couldn't learn it on the job, we would fail. As far as I know, this decision or timing was never discussed.

There were other timing decisions of major importance. From time to time we had to remind ourselves that we didn't have time to do new research, that we had to rely on work already done by others. Twice we had to extend our time span. In the fall of 1965, it became clear we could not have all our unit authors working during the 1965-66 school year. In the winter of 1967, we realized that the editing was going so slowly we couldn't meet our projected completion

date.

When the budget ax fell in the late summer of 1968, it was timing that prevailed--shuck everything else but finish the course during the 1968-69 school year! And we almost did. That completion was achieved only by the sacrifice of trials that would have been very valuable and by excluding some important half-finished materials.

The decision to close down the Project in the fall of 1970 is another timing decision. As an ex-member of the staff, I find it easier to understand. The decisiveness came from the Steering Committee. I felt it most clearly from the Chairman. That decision traded off the potential contribution of the continuing organization for the sense of well-being in having done a job and the avoidance of the risk of an on-going bureaucracy making work for itself.

How many materials?

A whole cluster of decisions answer the question: How many materials? In the beginning we spoke of a complete teaching system. The idea of a "demonstration" course, recorded on film or tape, had already been dropped by April, 1964, when I was first associated with the Project. Unit authors were encouraged to include everything appropriate. Motion picture films were soon questioned, finally dropped, as staff found that teachers seldom could assemble film,

projector, projectionist and students in a darkened room at the right time for a given learning experience.

Transparencies for the overhead projector were soon in. Slides changed to film strips and tapes to phonograph records as economies in commercial production. Topographic maps, air photos and stereoscopes survived on the enthusiastic recommendation of staff who had taught the New Orleans activity. Unit authors were unenthusiastic about the prospect of an Atlas and the idea was dropped. Of a whole series of reference volumes, only one is contracted for publication. There are no wall maps, no programmed versions, no artifacts. Compared to a textbook, Geography in an Urban Age is a pretty complicated package. But there is nothing superfluous, no extraneous frills. None of the hardware is even optional.

Another question in the "how many?" cluster relates to how long a course should be provided, how much by way of optional material. A minimal course could be supplemented by a teacher's own inserts. A slow teacher, or a teacher with a slow class, would not get through a full course designed for the median case. The separability of units help solve the slow teacher's problem. The editing team worked with the rule that about 130% of what the median teacher would cover was about all we could expect Macmillan to include.

Teachability

A commitment implicit in the materials approach is that everyting be teachable. No magic powers, no special knowledge, no cruel or unusual compulsions are needed to bring students through the course successfully. The activities had to be attractive to both the student and the teachers. Part of the attractiveness was from format and style, part from choice of subject--sports for instance. Much comes from the intrinsic power of the ideas and skills. Still more lies in the variety of classroom procedures, especially those loosely categorized as "inquiry."

But a commitment to inquiry is a relative thing. The most perfect form of inquiry is a self-motivated scholar in the library, the laboratory or the field. It is a long way from such open inquiry to the matching of maps of manufacturing to paragraphs describing the industries.

School trials with mostly "run-of-the-mill" teachers let us know what worked easily, what worked with difficulty, what didn't work. Revision gave us a chance to try to take the bugs out. In the last analysis, the decision was subjective--a reflection of the mind set of the editorial team.

Evaluation and Objectives

Decisions to be self-conscious about objectives grew out of the sense of responsibility to the discipline and

NSF. The evaluation program derived directly from the need to measure whether the objectives had been achieved. The usefulness of the evaluation in the revision process and the amount of time required for revision were badly underestimated at the beginning and on into the middle of the Project. Future projects should learn to allow time for the revisions, although it may be in the nature of things that the only thing which completes a writing job is a deadline.

Other decisions related to the school trials. Large scale trials would have provided a good diffusion mechanism, but we could only justify a minimum number of teachers who could still give some statistical reliability.

The range of possible feedback techniques stretched from teaching it ourselves through careful observation of selected teachers to written feedback from teachers and students. Rarely did we teach the material ourselves. We tried independent paid observers one year, but they seemed to identify so closely with the teacher that they gave little or no additional information. Staff visits were planned but not often executed. Experiences with pre and posttests and teacher and student reaction forms, more thoroughly described by Kurfman and Richburg else where, gave us a useful perspective on how the activities worked and how well they were received.

Decentralization

Where the idea of decentralized writing teams developing separate units came from is not clear to me. It was specified in the first NSF proposal that we would produce two units during the first year. The invitation of June, 1964, specified that the author could work either at Project headquarters or in his own setting. So did subsequent invitations. Only one unit author team came to Boulder.

BSCS and ESCP had relied upon writing conferences during the summer. I can remember recoiling from the idea of the writing conference, both because of the pressure under which people worked and because of the terrible administrative problem of running it. It was only after our own pattern had evolved, that I can remember putting into words what I consider its most important advantage--the fact that the scholar has time enough to invent and develop innovative teaching strategies.

By the same token, at the start none of us had a clear idea of the eventual division of labor between the unit authors and the evaluation and editing team. The choice of powerful ideas, the creativity in finding varied ways of learning them, the choice of appropriate data and illustrations, were the forte of the unit authors. The Project Office specialized in school trials, comparative analysis

of the feedback, putting the widely different parts into a more or less coherent and consistent whole. The Project Office developed several additional activities needed to achieve balance and sequence. In some cases (government of metropolitan London or rutile mining activities) it was feasible to farm out revisions, but most of it had to be done in the Project Office. Attempts to farm out editing generally were fruitless.

The final flavor of the course comes from a kind of common Patton-Helburn-Johnson-Kurfman-Richburg mind set. Until Don Patton was able to weld this team into a functioning unit few activities took final form. The urgency of completing the course in the 1968-69 year was the inability to keep the team together past the summer of 1969. What to keep? What to let go? What to change? How to change? These were decisions finally made by that group. Much of the change was actually carried out by that group too.

Commercial Feasibility

No one in the Project was interested in huge profits, but an implication of NSF-encouraged publication procedures was the feasibility of commercial publication. We were aiming for that relatively narrow zone where the price is low enough so schools can afford it but high enough

to allow the publisher a markup. Without the latter, he would have little initiative toward salesmanship. Without the former, his salesmanship would be ineffective. Few editing decisions were dominated by this commitment to the normal publication-marketing-adoption process, but the commitment was always in the back of our minds. The effort to engineer the Portsville board to an economical form was an example of direct action by the Project toward commercial feasibility without giving up an important teaching strategy. It is a little ironic that the only conscious introduction of an activity to make a unit commercially more saleable was "Migrant's to the City," an activity on the black ghetto in Chicago which probably would have been considered too controversial if it had been proposed by Arthur Getis in 1965.

Target Audience

At the end of the first limited school trials it became clear that we would have to make some further decision about the target audience. Ninth and tenth grade was already the chosen grade level based on the experience of the first two years of the Project. But some teachers reported the reading level too high for their students. At least one asked to be excused from further trials because the materials were "not verbal enough," i.e., not enough written

work, outlining, précis writing and the like.

Some perspective came during the fall of 1964 when we were trying to agree on an outline. I had circulated to Steering Committee members a list of criteria on which an outline might be rated and asked for ranking. It was clear that rigorous, good quality geography was high in Steering Committee values about the course. One might even have interpreted the results as an interest in academic respectability. Therefore, when it was evident we could not reach across the whole spectrum of ninth and tenth graders, it was easy to conclude that we should drop some portion of the poorer students from our target audience. In a memo, someone (Kurfman or Helburn probably) used "the upper 60 to 70 per cent" and it stuck.

NSF staff never showed much enthusiasm for improving the education of dull students. But they were intrigued by the possibility that we might turn up and "turn on" some able students among those who were not doing well. Geography had more than its share of students doing poorly. In many geography activities, graphic symbols replace both words and numbers. What better place to identify bright underachievers? What better way to take care of some of the 30 to 40 per cent of students not reached by our main effort? The proposal containing this logic was approved by the Steering Committee, fall of 1965 and winter of 1966. The program was to be activated the second year of the budget.

At the first Steering Committee meeting after the program was activated, even before the details had been thought through, the program was repudiated. The psychological complexity of underachievement was given as a major reason for the decision. Some of us wondered if it were not in part a fear of tarnishing the academic respectability of HSGP.

Another aspect of the target audience may have been involved in the negative reactions of both student and teacher to the Christaller central place model. We were never quite sure whether we had pushed teachers and students too far toward abstract thinking or whether geographers have some unsharable enthusiasm for hexagonal hierarchies. In spite of a major effort to keep the hexagons in---they were dropped.

The Outline

No other part of the Project occupied as much attention at the beginning as the outline. Whole Steering Committee meetings were devoted to it. Subcommittees met in between. There was some fear that the whole project would founder for lack of agreement on an outline.

Such preoccupation seems incongruous five years later. When one makes a presentation about HSGP, one rarely gets a question about the sequence of topics, much less any argu-

ment about it. The urban emphasis is welcomed but school people seem much less concerned than geographers. A few states and cities have rigidified with a region by region approach, but except for these, one feels a "who could care less" attitude about the outline. Some of the school men's lack of concern may be due to the general depreciation of sequencing. Some may be due to a lack of concern with content as compared to process.

Regardless of the present opinion, the outline was important to geographers then and probably will be to another geography group or to a group from any other discipline as they get started. Looking back, almost everything we did on the outline seems right:

a. It was representative of geography as a discipline in the United States.

b. It recognized its complementarity with ESCP.

c. It made no pretense of doing the whole job, but provided for a book of outlines to illustrate other approaches.

d. It was left flexible so that it could be adapted to the needs of the Project as they made themselves known in time.

In the end, the outline gave the unit authors some sense of direction, a target to work toward, without confining them too narrowly. At the same time, we were able to

collapse eleven units into six, to reposition Political Geography before instead of after Habitat and Resources, and to abandon the Frontiers Unit entirely.

Summary

The Project made a commitment to materials at the expense of teacher education and other changes in the educational system. Successive decisions focused on a complete but frugal package of teaching materials for a one-year course with a 30% overrun for fast teachers.

The overall effect of the timing decisions was: "Dive in, do the job at the present state of the arts, and get out." The commitment to teachability was protected by school trials with representative teachers. Always assuming the geography was worth learning, formal evaluation was pragmatic: Did it work? Was it liked?

The decentralization of the creative work allowed for great variety and ingenuity. Centralization of the evaluation and editing provided some coherence and consistency. Commercial feasibility was a constant constraint. The better the materials, the wider the range of school abilities they served, but HSGP made little attempt to accommodate the bottom one-third of American high school students. The outline seems to have occupied a disproportionate share of attention early in the Project, but no way of avoiding such

a thing is suggested.

Taken as a whole, Geography in an Urban Age seems much more innovative than its neighbors, ESCP and BSCS; much less so than EDC's Man, A Course of Study, or the Princeton-Rutgers, Time, Space and Matter course. Again and again HSGP seems to have pushed away from tradition and status quo as far as it could go easily. When the innovations approached impossibility, it did not stop but pulled back and got on with the job along the more conventional track. This pragmatism reminds one of Robert McNee's caution: "However successful the High School Geography Project or similar curriculum reform projects may ultimately be, it is important to recognize how profoundly conservative such projects basically are. A truly revolutionary curriculum advance would be one which in some way basically and permanently altered existing patterns of idea diffusion. The Project does not do this." (The Journal of Geography, February, 1968)

ADDENDUM:

These comments are written from the perspective of Kalamazoo in the spring of 1970, almost a year away from the Project. The ideas are from memory, without benefit of re-reading minutes, memos, outlines, Newsletters and the like. Sincere apologies to those whose contributions have been slighted.