Taking Charge of Change through Strategic Planning in
Academic Departments: The Case Study of a Biology
Department.

After reviewing the literature on strategic planning in an academic setting, it describes the evolution
of the biology department over the last 30 years from that of a
department focused on the training of elementary and secondary
teachers to one that places greater emphasis on graduate education
and research. The paper outlines two faculty retreats conducted by
the department and the college planning council to address: (1) the
future needs of the discipline; (2) the needs of region relative to
career opportunities and demographics; (3) competition and
cooperation in the region; (4) institutional strengths and
weaknesses; and (5) departmental strengths and weaknesses. Faculty
evaluations of the first retreat led to significant improvements in
the way the second retreat was conducted. Overall, the retreats
helped to focus the resources of the department in the achievement of
agreed-upon goals. An appendix contains documentation of the
department retreats, including retreat sign-up sheets, schedules,
minutes, and evaluations. (MDM)
TAKING CHARGE OF CHANGE THROUGH STRATEGIC PLANNING
IN ACADEMIC DEPARTMENTS:
THE CASE STUDY OF A BIOLOGY DEPARTMENT

Dona Fountoukidis, Ed.D.
Director, Office of Planning, Research and Evaluation

and

Martin E. Hahn, Ph.D.
Professor of Biology

William Paterson College of New Jersey
Wayne, NJ

SCUP 29
SAN FRANCISCO, CALIFORNIA
JULY 25, 1994
INTRODUCTION

In the Fall of 1991, the William Paterson College Planning Council experienced a significant turnover in its membership, which includes faculty, administrators and students. This provided the occasion for the entire Council to study some of the strategic planning literature to ensure that all members were familiar with its basic concepts. Several of the faculty on the Council, including one from the Biology Department, were interested in learning about how strategic planning could be applied in academic departments. Therefore, an attempt was made to identify readings on strategic planning at the department level.

A search of the literature on strategic planning turned up countless articles on strategic planning, institution-wide, but few on strategic planning at the department level. The four resources finally included in study packets for Council members are briefly described below; they provided the starting point for the planning process designed for the Biology Department.

A study of 40 department chairs at two midwestern universities (Pflaum and McKee, 1987) indicated strong support for strategic planning at the department level. More than 90 percent of the chairs agreed that strategic planning is an important practice for academic departments and all disagreed that strategic planning should be left to presidents and deans and that departments should concentrate on tactical planning.

A conceptual framework for planning at the department level is provided by Shirley (1983) in his article on levels of strategy for a college or university. In his model, levels 1 and 2 are concerned with strategies at the institutional level and levels 3 and 4 occur at the department level. Institution-wide decisions about mission, goals, enrollment, etc. provide the context for department level strategic planning.

Perhaps the best example of the power of strategic planning at the department level is provided by Richard Cyert (1988), former president of Carnegie Mellon University. "The objective of strategic planning," according to Cyert, "is to establish a plan by which a department, college or university can achieve a position that gives it a special place among other departments, colleges or universities. The strategic plan should enable the particular academic unit to achieve distinction in the areas that it decides to emphasize (p. 92)." He offers the example of Carnegie Mellon's Psychology Department which, as a result of a strategic planning effort, decided to focus on cognitive psychology and very quickly attained the leading position in the country in this area.

In his book, Opportunity from Strength, Cope (1987) offers several examples of planning by individual colleges within larger universities. One case study in particular, a partially
hypothetical case of the Bourbon College of Home Economics, modeled on the College of Home Economics at the University of Missouri, provides practical ideas on how to approach planning at a unit level within a higher education institution.

Although limited, this literature on strategic planning at the department level reinforced the belief of several Council members that strategic planning could be carried out productively at the department level and the Council began to plan a workshop on strategic planning for academic departments for the following year.

Anxious to get started before the planned workshop, in Fall 1992 two members of the Biology Department approached the College planning officer to request assistance in designing and implementing a strategic planning effort in the Biology Department. They cited two major motivating factors for the department's desire to do this. First, in the near future, a significant number of Biology faculty would be retiring. Instead of hiring new faculty on the basis of their ability to teach the courses of the retiring faculty, members of the department believed that these retirements provided an opportunity to clarify the direction of the department so that these lines could be filled to support this direction. A second reason was the anticipated hiring of a new dean for their school. The Department felt that it would be in a stronger position to determine its own destiny and perhaps influence that of the school if they had gone through a careful strategic planning process and reached agreement on the direction of their department.

Acting as a steering committee, the College planning officer and two Biology professors designed and provided leadership for a planning process that extended over an eight month period. The process was modeled closely on the college-wide strategic planning effort that had taken place at WPC several years earlier, but drew upon some of the terminology of the Home Economics Case study referenced above:

**Strategic Analysis Paradigm**
The overriding conceptual framework was provided by Shirley's strategic analysis paradigm (Shirley, 1987; see Figure 1, below). Whereas outputs of this analysis at the college-wide level are typically decisions concerning mission, goals, clientele, program service mix and geographic service region, the output the Biology department sought was a decision on the programmatic focus for the department. Just as the Psychology Department at Carnegie Mellon decided to focus on cognitive psychology and two other sub-areas, the Biology Department was seeking a focus that would provide direction in hiring faculty, recruiting students, developing curriculum, purchasing equipment, etc. The strategic analysis paradigm provided an organizing framework for a systematic consideration of factors in the external environment and at the College (both within and outside the department) with the potential to influence the direction of the Department.
ENVIRONMENTAL OPPORTUNITIES, THREATS AND CONSTRAINTS

INSTITUTIONAL STRENGTHS AND WEAKNESSES

MATCHING PROCESS

STRATEGIC DECISIONS

PERSONAL VALUES

Fig. 1. Strategic Analysis Paradigm
(Adapted from Shirley, 1987)
STRATEGIC PLANNING IN THE BIOLOGY DEPARTMENT

William Paterson College (WPC) is one of nine New Jersey state colleges. Since its founding in 1855, WPC's mission has changed from that of a normal school to a comprehensive college offering liberal arts and professional programs at the bachelors and masters level. Today the College has over 300 full-time faculty members in 30 departments housed in four schools and enrolls 8,000 undergraduate and 2,000 graduate students.

The Biology Department Today
The Biology Department is in the School of Science and Health, along with both traditional science departments and more professionally-oriented departments such as Nursing. Biology has 19 full-time faculty members and four technicians who serve various research and teaching roles in the Department. At present, there are 290 undergraduate Biology majors and 50 graduate students (9 of whom are teaching or research assistants).

The Biology Department’s facilities occupy about 40,000 square feet, about half of which is devoted to faculty and staff offices and classrooms and the other half to teaching/research laboratories. As a result of a Governor's Challenge Grant for Excellence in the natural sciences the Biology Department has been able to equip state-of-the-art laboratories for: plant and animal tissue culture, DNA sequencing and amplification, electron microscopy, animal behavior, behavior genetics, the neurosciences and ecology.

The Biology Department offers the BS degree in Biology and in Biotechnology and the MA degree in Biology and the MS in Biotechnology. In addition, a student can combine the BS and MS in Biotechnology in a 5 year program. An interdisciplinary component is provided by the Biopsychology Honors Program. That program founded in 1976, offers an add-on curriculum for highly motivated students of several majors.

In a typical year (1992-1993) the department offered 143 undergraduate class sections, of which 18% were for Biology majors, 33% were service courses for students of other majors and 49% were in the General Education curriculum. Eight graduate courses were offered and 5 courses were offered in the Biopsychology Honors Program.

The Biology Department Over Time
Over the past three decades the Biology Department has undergone significant change. Thirty years ago, the Department had a natural history focus and specialized in training primary and secondary teachers. In response to the change in the mission of the College to a general liberal arts institution and in response to the "molecular revolution" in biology, the diminished importance of systematics and the emergence of major specialty areas in biology (e.g. the neurosciences), the Department actively changed its focus. That change was reflected in course curricula, faculty
hiring and equipment purchases. An indirect effect of faculty hiring in the buyer's market since the 70's has been a profound increase in the amount of scientific research conducted in the department.

As a result of these rapid changes in the last 15 or so years, it became increasingly difficult for the Department to define its mission. The pressures to teach courses to non-majors, giving them an appreciation of the methods of science, to give high level courses in anatomy and physiology to nursing students and to prepare biology majors for careers in medicine, teaching, research and technology has made it difficult for the Department to have a clearly articulated program other than "something for everyone." The replacement of faculty who retired was driven by the need to replace the retiree's teaching areas. It became clear that some type of department plan was needed.

Development and implementation of the planning process proceeded chronologically as outlined below.

Organizing the Planning Process
In the Fall of 1992 two members of the Department (one a past long-term chair and the other a member of the College Planning Council) began a collaboration with the College planning officer that constituted a steering committee. The result of that collaboration was a process involving retreats and periods of study before and between retreats. Given a deficit in the literature on planning at the department level, the steering committee began with formats traditionally used for institution-wide planning which it adapted for an academic department.

Retreat #1
Department members were asked to volunteer to serve on one of six groups to study an issue in the external or internal environment and report in depth at the first retreat (see Item 1, Appendix A). Those study topics were:

1. Future directions of the discipline
2. Needs of the region: career opportunities
3. Needs of the region: demographics
4. Competition/cooperation in the local area
5. Institutional strengths and weaknesses
6. Departmental strengths and weaknesses

The retreat was held off campus for a day and a half in early February, 1993. The Department heard and discussed reports on the above 6 topics, engaged in small group exercises and held several whole department discussions (see Item 2, Appendix A). The planned-for end point of the retreat was a set of possible academic plans; however, this was altered by the steering committee at the retreat. Instead, the retreat concluded with a whole-group session in which department members proposed possible "directions of travel" for the Department. In doing this, participants were asked to consider the information presented earlier on the strengths of
the Department and the College, the future of the discipline, the needs of the region, etc. This process yielded nine different "directions of travel" for the department.

Retreat #2
In order to reduce the number of directions to about three, the steering committee planned a second retreat -- this one was held on campus for half a day. In preparation, committees in the department carefully examined each of the nine proposed directions of travel, including their feasibility, cost and pros and cons (see Item 5, Appendix A). After discussing each proposed direction of travel at the second retreat held in March, the Department "brainstormed" potential clusters or groupings of those nine routes of travel (see Item 6, Appendix A). Four clusters were identified and, in the process, some of the original directions were dropped or modified. In fact, the final three clusters were quite similar to each other, with only minor variations among them.

Retreat #3
The steering committee planned a third and final retreat for mid May. In preparation for this retreat, committees within the department studied each of the proposed clusters with respect to its implications for recruiting, curriculum, funding, etc. (see Item 7, Appendix A). At the conclusion of the third retreat, the Department adopted one of the clusters as the departmental plan. That plan is currently being implemented.

Assessment and Outcomes
Evaluation of the Process. After the initial retreat, the College planning officer mailed an assessment questionnaire to each department member. Of the 17 faculty who attended, 15 returned their questionnaires (see Item 3, Appendix A). In general, the comments were positive and constructive. Most faculty members "bought into the process," though there were skeptics who thought it was only an exercise.

Several themes emerged in the suggestions for improvement. First, the quality of some of the informational reports developed by the subcommittees could have been improved and it would have been helpful if they had been available earlier. Second, there was too much repetition. Specifically, written reports were developed and distributed at the retreat. An oral version was delivered and discussed by the group as a whole. Then the reports were discussed once again in small groups. Some felt this last step might have been eliminated. A third useful suggestion was that it would have been helpful if the department had reviewed the Strategic Analysis Paradigm before preparing the reports. Finally, several mentioned that more aggressive facilitation of discussion would have been helpful in moving the discussion along.

In viewing the process in its entirety, several additional points can be made. First, it was important to structure the discussion at each of the meetings. It was also important to have some flexibility in the extent to which that structure was adhered to.
For example, at the off-campus retreat, the Steering Committee met periodically to make adjustments in the schedule and to provide feedback to each other as we assumed leadership roles.

Second, although not originally planned, it was helpful to break the process into three meetings and to provide sufficient time for people to reflect on the progress. This was particularly true at the end of the first retreat where discussion became more specific and potentially threatening to some individuals who feared that their area of expertise might not be among those chosen for emphasis.

Asking participants to prepare written reports examining the implications of desired directions of travel helped department members understand more clearly the advantages and disadvantages of each direction. It also required a level of commitment from those proposing a particular direction. In one case, a possible programmatic focus died a natural death when no one was willing to invest the energy to prepare the written report.

Finally, it is perhaps unreasonable to expect that most departments would make dramatic changes as a result of this process without some very strong leadership and possibly even outside pressure. The fact that members of the steering committee also had a vested interest in the outcome created the potential for a conflict of interest. It helped to have an outside facilitator, in this case the College planning officer, to lead the more sensitive discussion.

In the end, the directions agreed to by the Biology Department were not dramatically different from what they had already been doing. However, the strategic planning effort served to clarify the directions, to make them explicit and to develop ownership and support for them among department members because they were arrived at through a participative process.

In the Year Since. Results of the retreat are now being integrated into the Department’s fabric. The plan has become a touchstone for curriculum development, faculty hiring, student recruiting, budget decisions, etc. There has been little wandering from the course that was set. An unexpected benefit occurred recently. The National Science Foundation has a grant program for renovating infrastructure which supports research and research instruction. The strategic plan became the focal point for the department’s grant proposal to that program.

STRATEGIC PLANNING IN ACADEMIC DEPARTMENTS: DOES IT HAVE A FUTURE?

We believe that the benefits of strategic planning in academic departments are substantial and that it does have a future.
Benefits
The following are what we believe to be some of the major benefits:

1. To the extent that a department can agree on a programmatic focus, preferably areas that make it distinctive, it will be better able to use its resources effectively and thus achieve excellence. Provided that the departmental focus appropriately takes into account both the external and internal environment and was developed through a collaborative effort, it provides effective direction for: recruitment and orientation of new faculty, recruitment of students, curriculum development, resource development (especially grants), etc.

2. Involvement in strategic planning at the department level provides an opportunity to help faculty get "the big picture," to see beyond the confines of their area of expertise and their department to learn how these relate to the college and its external environment. This point is made in a conference paper by Micek (1984).

3. A collaborative strategic planning effort at the department level can provide a nonthreatening means of drawing faculty into discussions about important issues.

4. Perhaps one of the greatest benefits is that of empowerment, of helping faculty take control over the future of their department.

Institutional and Departmental Context
Strategic planning at the department level can be particularly helpful in an environment in which there is some flexibility for departments to be entrepreneurial. Because the Strategic Analysis Paradigm forces departments to take into account the institutional environment, it reduces the difficulties that might ensue if a department were to choose a direction that is inconsistent with that of the college or university.

Departments must be motivated to undertake strategic planning because they see the benefit -- not because it is mandated. The department chair can play an important role in this but it can also come from other faculty in the department, as was the case with our Biology Department. One motivating factor that seems to be present at William Paterson is the knowledge that resources are becoming increasingly limited and that those departments who know most clearly where they're going will fare best.

Although a mandate to do strategic planning is not needed and may, in fact, be detrimental, moral support and encouragement from the administration is essential. Departments need to believe that if they invest time and energy, they will be taken seriously. This does not mean that all of their recommendations will be implemented.
CONCLUSION

In May 1993 the Planning Council offered the workshop on strategic planning for academic departments which was mentioned in the introduction. This workshop used an outside consultant and focused on the role of the department chair. It laid the groundwork for a follow-up workshop in February of this year which had a broader audience.

The February workshop was conducted by the College planning officer and current and past members of the Planning Council. An effective component of this workshop was a panel of representatives from three departments who were at varying stages in a strategic planning process and who were taking somewhat different approaches.

These workshops have been enthusiastically received. As a result, a number of other departments have begun to organize strategic planning efforts. The role of the planning officer has varied from department to department. In several instances (History, Languages and Cultures, Exercise and Movement Science), she has attended department meetings to talk about strategic planning and then the department has done the planning on its own. In other cases (Nursing, MBA Program), she has facilitated discussion at a retreat. In still another case (Community Health), she was invited to a departmental meeting to critique the results of a strategic planning effort.

The interest in strategic planning at the department level has been more than we would have imagined when we started down this path two years ago. The response we have received and the outcomes achieved, suggest that strategic planning in academic departments can be quite productive. We believe that our experience can be duplicated in other colleges and universities, as well.

REFERENCES


APPENDIX A

STRATEGIC PLANNING IN ACADEMIC DEPARTMENTS:  
A CASE STUDY OF THE BIOLOGY DEPARTMENT  
AT WILLIAM PATerson COLLEGE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subcommittee sign-up sheet for first retreat.</td>
<td>1</td>
</tr>
<tr>
<td>2. Schedule for first retreat.</td>
<td>3</td>
</tr>
<tr>
<td>3. Assessment results from first retreat</td>
<td>5</td>
</tr>
<tr>
<td>4. Notes from first retreat (first page only)</td>
<td>7</td>
</tr>
<tr>
<td>5. Subcommittee sign-up sheet for second retreat</td>
<td>9</td>
</tr>
<tr>
<td>6. Schedule for second retreat</td>
<td>10</td>
</tr>
<tr>
<td>7. Homework assignment for third retreat</td>
<td>11</td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Biology Faculty
FROM: M. Hahn
DATE: October 8, 1992
RE: Planning Committees

For our upcoming planning project and retreat, three person subcommittees within the department will prepare reports on each of the following topics listed below. On which would you like to serve? Give preferences for three. You will serve on only one of the three.

PLANNING COMMITTEES -Please Prioritize (1,2,3)

____ Future Direction of Discipline
____ Future Career Opportunities in Discipline
____ Competition - Local Area
____ Needs of the Region
____ Institutional Strengths & Weaknesses
____ Departmental Strengths & Weaknesses

Please complete and return to M. Hahn by Wednesday, October 14, 1992.
RETREAT SCHEDULE

Saturday 2/6/93

5-6 pm    Check-in Warwick Conference Center
6:00-7:00  Dinner
7:00-7:15  Introduction to Departmental Planning
           Dona Fountoukidis, Jane and Marty
7:15-8:15  Group reports and comments
8:15-8:30  Break
8:30-9:30  Small group effort, Tasks 1 and 2

1) Look inside the college - What strengths do the department and college have that the biology dept can build on (e.g., location, reputation, technology, links with other programs)?

2) Look at the future directions of the disciplines of the biological sciences - What opportunities do those directions suggest for the department?

9:30-9:45  Break
9:45-10:30 Group reports and discussion
10:30      Adjourn for the evening
Sunday 2/7/93

8:30-9:15  Breakfast

9:15-9:30  Recap, observations, comments

9:30-10:15  Small group effort, Task 3:

   3) Look outside the college - What are the needs of the region and what opportunities do those needs provide?

10:15-10:45  Group reports and discussion

10:45-11:00  Coffee break

11:00-12:00  Entire department, Task 4:

   4) Based on our current strengths, future directions of the discipline and the needs of the region, propose possible directions of travel.

12:00-12:30  Free time

12:30-1:15  Lunch

1:15-2:30  Small group effort, Task 5:

   5) Propose the framework of a strategic plan for the biology department based on two or three directions of travel. What are the implications for:

      curriculum       pedagogy
      research         faculty
      students         new faculty
      budget           faculty development

2:30-2:45  Coffee break

2:45-3:15  Present strategic frameworks

3:15-3:30  Summary and wrap-up of retreat

3:30  Adjourn
1. Number (out of 15 surveys returned) selecting each response category. Two responses were between response categories (see b and e).

<table>
<thead>
<tr>
<th>Category</th>
<th>AGREE STRONGLY</th>
<th>AGREE SOMEWHAT</th>
<th>DISAGREE SOMEWHAT</th>
<th>DISAGREE STRONGLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The strategic analysis paradigm (i.e., looking at external issues, internal strengths and weaknesses, future directions of the discipline and values) was a useful framework for examining future directions of the Biology Department.</td>
<td>9</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b. The group reports prepared prior to the retreat provided an informed basis for discussion.</td>
<td>4</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>c. It was helpful to get away from the campus.</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>d. It is important for the Biology Department to develop two or three specific directions for the future.</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>e. Overall, the retreat was productive.</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

2. How might the retreat have been improved?

- More aggressive facilitation to prevent veering off track. Some discussions were targeted for very specific planning goals but lost momentum due to prolonged "opinions," from one or few faculty, that were more closely related to topics discussed during a different time slot. However, I feel that Dona did a very good job in her attempts to make the most of time.

- A little more openness among the faculty -- leaving behind old baggage!

- Better and longer committee work on campus before the "retreat."

- There was a lot of repetition -- we didn't need 4 or 5 subgroups all reporting on the same future directions of the discipline and values.

- What are meant by "values of the discipline" anyway? I think a better term would have been "areas of common interest."

- More detailed reports, e.g., specifics of other bio programs in the state and grant opportunities would have helped avoid use of old baggage!

- More aggressive control of the discussion to keep it focused on topics -- sometimes we drifted.

- Better accommodations (room, food...)

- Better accommodations

- Weather and time for a walk

- More time spent on "future" of biology

- I think the SAP had some problems

- Different categories discussed during seminar overlapped quite a bit and it seemed like we rehashed a lot of ideas.

- We never got to discuss the values held by individual and the department. I think that this is really the foundation for decision making and commitment.

- The prior reports should have been more complete.

- The strategic analysis paradigm should have been explained beforehand to better prepare the participants for that discussion.

- A written summary and analysis of the discussions and dialogue should have been prepared in about 2-3 weeks after retreat.

- Perhaps a different location if we go off campus. Would have been nice to have TV, food, etc. available after the evening session. Most people were rather "hyper" and didn't want to go right to sleep. Restaurants were some distance away.

3. What suggestions do you have on how to proceed from here?

- Forward momentum will have to be maintained by Voos and Hahn with more small group and "committee-of-the-whole" meetings in the near future. Possible pathways of finding direction need to be fleshed out by strong proponents of each direction then reviewed by everyone for balance. I also suggest continued input from Dona to aid/reinforce our actions. In fact, because the Biologists do not want to be outpaced by others (competitive spirit), Dona might use a little psychology (?) in keeping us moving.
Continue the process as planned to reach a conclusion in terms of direction for the department in the next decade.

Longer time to cogitate about the retreat. Committee work can't be rushed.

3 or 4 hour sessions at the most would be more productive. We were more productive the second afternoon when we were under a deadline. Work on definite suggestions now, in small committees, as planned.

Detail the implications of travel -- new courses, faculty, budget concerns, etc.

Meet again in long session to hammer out an agreement.

Follow up on questions/problems discussed...

Department must evaluate

More on what we mean by "directions"

Research, teaching, other innovation

Continue to discuss main topics brought up at retreat at another all day meeting.

I think we should be much more student-oriented. Major, general education, graduate, minority, foreign in on planning. We do a fine job now and will continue to do so. But these efforts should be part of the planning.

Need to discuss values and commitment and then go over suggested directions.

A decision on future directions has to be decided upon.

Meetings of Bio Dept. faculty to make decisions for future of the dept.

Follow-up meetings

We will need several long meetings to discuss where our future focus will be. Perhaps these could be held on campus - Friday maybe.

4. Other comments:

Departments should look forward to this kind of self-evaluation on a regular but not too frequent basis.

I really don't believe that 5 years from now, or even 2 years from now, much will be changed in the department as a result of these Biology planning sessions. If we plan a definite curriculum, that's productive, but endless talking about internal strengths and weaknesses, etc. (which we are all too familiar with) is a waste of our time.

Food was less than could have been -- the setting was spectacular.

Will Administration "listen" when the department makes request for improvement?

No spouses

Should select a location for retreat that had better accommodations. Bedrooms and food were not very good.

It is essential that an outsider be present at these meetings to help focus the group and draw out individuals.

With the service courses we teach in General Ed., Nursing and other areas we have a large number of faculty already committed to these areas. There may not be enough faculty positions available to greatly emphasize on or two specific areas of study.

I thought overall the retreat was well planned and that we accomplished quite a bit.
Department of Biology
Planning Retreat
February 6 - 7, 1993
Warwick Conference Center
Comments and answers transcribed from easel sheets
by M. Hahn, February 14, 1993

RETREAT - A period of group withdrawal for study or meditation

Results of the Retreat

A. Comments on the 6 retreat reports:

1. Future of the discipline:
   1. genetic engineering of plants (as additional area)
   2. evolution (as additional area)
   3. developmental area under molecular area is weak
   4. curricular implication: process as well as facts
   5. spirit of inquiry
   6. problem oriented approach to instruction, e.g. H.B.
   7. physiology courses (area) is neglected
   8. building bridges between major areas

2. Needs of the region: career opportunities
   1. more active teaching role for department in the sciences and math
   2. more elementary and secondary ed. majors needed
   3. develop a physical therapy program?
   4. what jobs do our students get?
   5. summer internships needed
   6. cooperative education - resurrect that program?
   7. more organized approach to advisement, especially for transfer students

3. Needs of the region: demographics
   1. nature of the immigrant population
      a. thinking processes and economic conditions
      b. ESL
      c. freshman seminars (special sections)
   2. from 1993-2000 there will be a decline in "traditional freshman" population
   3. increase in "middle-aged" students
   4. the quality of biology majors (SAT scores and H.S. rank) has increased over the past four years
   5. tuition may be getting too high for many students

4. Competition/cooperation in the local area
   1. Liberty Science Center
   2. workshops for ed. ed. teachers featuring can do labs
   3. more contact with local H.S. teachers
MEMORANDUM

To: Biology Faculty

From: M. Hahn and J. Voos

Date: February 15, 1993

Re: Continued planning "outline of a strategic plan"

As we concluded our recent successful retreat, we agreed to form committees to outline a strategic plan for the implementation of the various directions of travel. Jane and I have grouped the nine directions of travel into the five sets below (one committee per set). Please volunteer for one committee whose charge is.

Outline a strategic plan for the implementation of ________ direction of travel considering the issues of:

- curriculum
- pedagogy
- research
- faculty
- students
- new faculty
- budget
- faculty
- potential grant funding

1. health pre-prof (emphasis on minorities)
   Members: __________, __________, __________& __________

2. a) improve science education
    b) college as science center
   Members: __________, __________, __________& __________

3. a) technology approaches to environmental problems
    b) ecology basic systems and applications
   Members: __________, __________, __________& __________

4. a) maintain and update biotech and link to other areas
    b) biomanagement
   Members: __________, __________, __________& __________

5. a) biological bases of behavior (emphasis on minorities)
    b) bio majors to graduate school (emphasis on minorities)
   Members: __________, __________, __________& __________
## Schedule of Events

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30 - 2:30</td>
<td>Brief reports of committees outlining a strategic plan of a path to follow. Questions and comments on the plans</td>
</tr>
<tr>
<td>2:30 - 2:45</td>
<td>Individual or small informal group reflection in preparation for group effort in identifying clusters (mapping) of paths to be travelled</td>
</tr>
<tr>
<td>2:45 - 3:15</td>
<td>Whole department &quot;brain storming&quot; on identifying clusters of pathways that could work together</td>
</tr>
<tr>
<td>3:15</td>
<td>Pizza break</td>
</tr>
<tr>
<td>3:30 - 4:00</td>
<td>Cluster groups (composed of persons wishing to make a commitment to a particular cluster. Implications of clusters for curriculum, etc. What would the department be like if we chose this or that cluster? How comfortable would you be with a particular cluster? What advantages does a particular cluster present in light of our strengths, or weaknesses? What roadblocks are present in the implementation of a particular cluster?</td>
</tr>
<tr>
<td>or 4:30</td>
<td>Reports and discussion of cluster groups</td>
</tr>
<tr>
<td>4:00 - 4:30</td>
<td>Reports and discussion of cluster groups</td>
</tr>
<tr>
<td>or 4:30 - 5:00</td>
<td>Reports and discussion of cluster groups</td>
</tr>
<tr>
<td>5:00</td>
<td>Retreat from the retreat</td>
</tr>
</tbody>
</table>
MEMORANDUM

To: Biology Faculty
From: M. Hahn and J. Voos
Date: April 8, 1993
Re: Details of Strategic Plans of Clusters

Recall that at our last meeting, we made excellent progress toward completing a departmental plan by identifying three clusters of proposed directions of travel. Those clusters in their order of suggestion and the faculty who identified with them were:

1) Ecology - Biotechnology - Biopsychology, each with a commitment to recruiting greater numbers of minority students: Benno, Gardner, Hahn*, Hanks, Hu & Wallace

2) Ecology - Biotechnology - Biopsychology - Genetics, also with a commitment toward the recruitment of minority students: Callahan*, Desroches, Levine, Risley, Sebetich & Weisbrot

3) Ecology - Biotechnology - Biopsychology - Science Ed (8-12) also with a commitment toward the recruitment of minority students: Chesney, Grant, Rosengren, Voos* and Werth

*Denotes committee chair

Our job now and the next step in selecting the routes of department travel is to flesh out each of these clusters so that we can visualize the effects of implementing the plans over the next few years. In order to do this, the committees who volunteered to describe the consequences of each cluster should meet, discuss the issues and write a dense 3-4 page document outlining the consequences for a final (yes, final!!!) meeting for this year at which we select a cluster.

Based on the work we have done to date as reflected in reports prior the retreat (e.g. "Future of the Discipline" or "Strengths and Weaknesses of the Department"), "Results of the Retreat" and reports on "Outline of a Strategic Plan for _____", discuss the implications of your cluster for the department.

The reports should answer the following questions:

A. Given the current state of the Biology Department, its strengths and weaknesses, the strengths and weaknesses of the college and the characteristics of region which serves the college, project your cluster 5 years into the future and describe the department in terms of the following.
1) curriculum - What courses would be added, modified or deleted? What changes would be made in requirements? What new courses would you propose to connect areas within biology? What courses would be developed to connect biology to other departments? How would those changes relate to faculty abilities and interests (faculty profile)?

2) students - What are the characteristics of students we should plan to recruit into our programs? How will we recruit and retain them? How will the changes in the curriculum augment our ability to teach the students we intend to recruit?

3) faculty hiring - Assume that 4 faculty lines would become available, how should we fill them? Prioritize the list of those to be hired.

3) faculty duties - How will faculty allocate their time to teaching, advising, research, and developing new pedagogy? Would you expect changes in faculty compensation, e.g. increased release time and/or compensation for independent study and thesis supervision?

4) potential grant funding - Offer hard information on how increased resource demand created by your cluster would be met by external funding sources.

5) time line - Describe a tentative but realistic time line for the implementation of your cluster over a 5 year period. What can be accomplished in the first year and who will do it? For instance, who will become involved in recruiting and what are some tentative recruiting goals? What courses should be added in the first year? Who will develop them? What grants should be applied for and who will write the applications and administer them? Etc!!

B. Briefly describe how your cluster would build on departmental, college and regional strengths. What are those strengths? What are the needs of the region that would be met with this cluster?

C. Frankly address the potential roadblocks inside and outside the department. How could those hinderances be overcome?

D. As a result of discussion in your group, how will your cluster work in the department? What do you anticipate that the level of commitment in the department will be? Can we effectively involve most department members in your cluster?