It is generally acknowledged that all parties benefit from efforts to facilitate the process of student transfer from two- to four-year colleges, yet there are very few institutions with formalized transfer articulation agreements. The greatest deterrent to the development of such agreements is the considerable commitment of time and effort that is required to conduct the course-by-course analyses that serve as the foundation for the whole transfer articulation process. While determination of course content and overlap can be done individually on each participating campus, it is vital that personal face-to-face contact be made between representatives of each program. This contact facilitates the exchange of precise information, the adjudication of problems, and the development of a professional network among the participating faculty members. An example of the effectiveness of this process is provided by the State University College at Plattsburgh (SUCP), which decided to formalize its articulation agreements with all of the community colleges in New York State in the mid-1970's. An important aspect of these articulation efforts was the decision to place the articulation agreements in a format that could be easily understood, readily available, and quickly updated. The time and effort involved in initiating this system was great, but once completed very little effort has been required to maintain and update it. Appendices include samples of transfer articulation agreements between SUCP and a community college for particular programs. (EJV)
FACILITATING THE TRANSFER PROCESS: THE NEED FOR BETTER ARTICULATION BETWEEN TWO AND FOUR YEAR COLLEGES

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FACILITATING THE TRANSFER PROCESS: THE NEED FOR BETTER ARTICULATION BETWEEN TWO AND FOUR YEAR COLLEGES

Introduction

The number of students enrolled in two-year colleges has increased greatly during the past 25 years (1) and a significant proportion of these students continue their education at baccalaureate degree granting institutions. As a result, it is imperative for both types of colleges to make this transfer of students, wishing to continue their education, as smooth and efficient as possible. Everyone involved in the transfer process benefits from such effectiveness, a factor of increasing importance as the number of traditional college-age students will continue to decline during the next few years (2). It is imperative, therefore, that the two-year colleges demonstrate clearly that the process of transferring to the four-year institutions is relatively trouble free, while those "senior" colleges who develop a record of easy administrative transfer for the qualified student (not an academic open-door policy) will reap significant enrollment rewards. If it is in the interests of all parties concerned

1 Between 1960 and 1985 Community College enrollment increased by 125%.
to facilitate the transfer process, why are there so few institutions with formalized transfer articulation agreements?

Transfer Articulation

Transfer articulation agreements require a considerable commitment of time and effort between the participating colleges. The specialized requirements of one institution often will not mesh with those of the other. Much energy must be employed in familiarizing administrators and faculty with each course at each institution so that it can be determined that, for example, Introductory Chemistry at College A is a parallel of Chemistry I and not of Technical Chemistry at College B. Course outlines have to be carefully reviewed, course content analyzed and the amount of overlap assessed. To do this work on a course by course basis is extremely time consuming, yet it is the foundation for the whole transfer articulation process.

While course content determination and overlap can be done individually on each campus, assuming both parties are willing to share the necessary information, it is vital that personal contact be made between representatives of each program. Through face-to-face meeting potential problems and difficulties can be handled as they arise and adjudicated expeditiously to the satisfaction of all concerned. Furthermore, the time table of specific course offerings can be determined, and information about
anticipated course number, title or content changes passed along. Even more importantly, information about enrollment restrictions on courses may be exchanged. Simply reviewing courses from a college catalog is not sufficient. Some courses are restricted to specific majors others may still be listed in college catalogs but never taught. If a meaningful and accurate transfer articulation agreement is to be consummated this type of information is vital and can often be obtained only through personal contact.

While personal contact is important, it is an extremely time consuming and costly component in the articulation process. This is probably the reason why more institutions do not undertake a formalized agreement to facilitate the move of students from two to four year colleges. For those four year colleges that do take the time, the pay-offs are great not only in terms of enrollment but also in the accompanying professional network which grows from the sharing of information and working together. Personal contacts are important in academia. Not only are academicians guilty of staying behind the walls of their disciplines but they rarely interact with the staff at other institutions, even those colleges across town or in the next county. While it is not the purpose of this paper to debate inter-college relations, a carefully organized program of transfer articulation agreements does have the effect of increasing the flow of information between colleges and increasing the number of professional contacts.
Any transfer articulation agreement involves considerable interaction between professionals. This type of on-going contact is important for maintaining the effectiveness of the agreements. Changes in staffing and programs will influence parts of articulation agreements and as such must be reported to all the participating institutions immediately. Through personal contacts made earlier in the agreement process, the corrected or new information can be given to the appropriate people as quickly as possible. Furthermore, the contact persons at the participating colleges can be used to help solve other problems which might arise or may be utilized for joint projects beneficial to both institutions. The greater the professional network one has, the more effectively one may function.

The Plattsburgh Case Study

The generalities of program articulation have been discussed to set the stage for a specific case study. Within the State University of New York are found 37 community colleges and 13 four-year arts and science colleges. In spite of the fact that these institutions belong to the same educational system, the transfer of students was not as efficient or as effective as it might have been. The State University College at Plattsburgh decided to formalize the transfer articulation agreements with all the community colleges in the state in the mid-1970's. While an Associate Vice President was appointed to
oversee the entire process, the individual academic departments and centers undertook much of the work. Such was the case for the multi-disciplinary Center for Earth and Environmental Science.

While most of the procedures outlined above were undertaken by the Center for Earth and Environmental Science (CEES) several additional elements were introduced. The most important of these was to place the articulation agreements in a format that could be easily understood, readily available, quickly updated and have a multitude of other uses. To accomplish these goals, the transfer articulation agreements were put on computer disc (using an Apple IIe computer, although any micro-computer can handle the data). The hard copy print-outs (see Appendix I) show the program course requirements of any one of the CEES degree programs. On the other side of the page are listed all of the courses at a particular community college that a student was required to take at that two-year institution to complete their associate degree program. At a glance, the student or advisor can see which courses meet the CEES program requirements and which courses still need to be taken to complete the baccalaureate degree. In fact, the incoming community college student can use the sheet as a work copy to determine class schedules during the two years he/she is at Plattsburgh. Ease of utilization by both student and advisor is the key to this process plus the fact that any change in any of the CEES programs can be made
quickly and distributed to our contact person at the two-year colleges within days of being approved on our own campus.

Conclusion

The transfer articulation system described above has been in operation for nearly two years. It has facilitated our processing of transcripts received from the community college transfer students. It has increased our levels of interaction and cooperation with the faculty and staff at the community colleges. Our new students have a much clearer picture of their program accomplishments and needs, while the faculty advisors can spend more time advising these new students, rather than just helping with course selection. The time and effort involved in initiating this system was great but once completed, very little work is required to maintain and update it. As a result, the initial investment of effort has paid off tremendously. Students, faculty and staff all benefit from the procedure and the various academic institutions within the State University of New York system can better become a more cohesive group rather than a distribution of seemingly isolated, non-interacting, colleges.
APPENDIX I

SAMPLE TRANSFER ARTICULATION AGREEMENTS
REQUIREMENTS FOR THE MAJOR IN GEOLOGY, B.A., AT SUNY PLATTSBURGH

I. GENERAL EDUCATION REQUIREMENTS 40 cr.

The following courses, required for this program, are taken as part of the General Education Requirements:

A. General Learning Skills 10 cr.
   1. Written Expression
   2. Communication Skills
   3. Reasoning Skills
   4. Library Research Skills

B. Distributive Requirements 19 cr.
   1. Formal Systems of Thought
   2. Natural World
   3. The Individual and Society
   4. Human Heritage
   5. The Arts as Aesthetic Experience
   6. Foreign Culture or Language

C. Integrative Component
   9 cr.

D. Physical Education 2 cr.

II. MAJOR REQUIREMENTS: 52-56 cr.

A. Departmental Requirements 36 cr.

1. GEL 101 General Geology (4 cr.)
2. GEL 102 Evolution of the Earth (4 cr.)
3. GEL 310 Mineralogy (4 cr.)
4. GEL 312 Petrographic Microscopy (1 cr.)
5. GEL 323 Igneous and Metamorphic Petrology (4 cr.)
6. GEL 324 Sedimentology (4 cr.)
7. GEL 451 Structural Geology I (4 cr.)
8. Geology Electives (11 cr.)

B. Cognate Requirements:

1. Calculus OR Statistics OR FORTRAN OR PASCAL (3 - 4 cr.)
2. Chemistry with Lab (4 cr.)
3. Physics with Lab (4 cr.)
4. Laboratory Science OR Math. (excluding Earth Science) (8 - 9 cr.)

III. ELECTIVES 27 - 29 cr.

1. ADVANCED WRITING REQUIREMENT 3 cr.

Courses at your institution that meet program requirements at SUNY Plattsburgh.

Effective for students who enter the College as Freshman beginning Fall 1984; Transfer students with 18 credits or less in Spring 1985, 36 credits or less in Fall 1985, 54 credits or less in Spring 1986, and all students entering in Fall 1986.

Total 125 crs.
REQUIREMENTS FOR THE MAJOR IN ENVIRONMENTAL SCIENCE AT SUNY PLATTSBURGH

I. GENERAL EDUCATION REQUIREMENTS

The following courses, required for this program, are taken as part of the General Education Requirements:

A. General Learning Skills
   1. Written Expression
   2. Communication Skills
   3. Reasoning Skills
   4. Library Research Skills
   ENV 333 Biometry may be substituted for MAT 161, but another course must be taken in Analytical Skills.

B. Distributive Requirements
   1. Formal Systems of Thought
   2. The Natural World
   3. The Individual and Society
   4. Human Heritage
   5. The Arts as Aesthetic Experience
   6. Foreign Culture or Language

C. Integrative Requirement
   9 cr.

D. Physical Education
   2 cr.

II. MAJOR REQUIREMENTS:

A. Departmental Requirements
   42 cr.
   1. COMMON CORE
      ENV 101 Introduction to Environmental Science
      ENV 201 Environment and Society
      ENV 210 Ecology
      GEG 120 Introduction to Physical Geography
      ENV 400 Seminar in Environmental Science
   2. ENVIRONMENTAL SCIENCE COURSEWORK
      26-30 cr.
      Choose one course from each of the following groups:
      a. PHYSICAL ENVIRONMENT
         3-4 cr.
         ENV 270 Introduction to Soil Science
         GEL 245 Prin. of Hydrology
         GEE 320 Climatology
         GEE 322 Regional Geomorphology of USA
         GEE 422 Geomorphology and Soils
         GEL 346 Environmental Geology
         GEL 341 Geomorphic Processes
         ENV 348 Water Resources
      b. BIOLOGICAL ENVIRONMENT
         3-4 cr.
         ENV 330 Wildlife Ecology
         ENV 332 Plant Ecology
         ENV 335 Population Ecology
         ENV 331 Community and Systems Ecology
         ENV 339 Forest Ecology and Management
         ENV 431 Freshwater Ecology
         ENV 232 Ecology of Woody Plants
         ENV 301 Field Botany
         ENV 334 Ecosystem Analysis
         ENV 408 Marine Ecology

Courses at your institution that meet program requirements at SUNY Plattsburgh

BIOI 143 Environmental Science
BIOI 152 Contemporary Problems in Pollution
BIOI 155 Ecology

MATH 113 Statistics
MATH College Algebra with Trigonometry

BEST COPY AVAILABLE
c. HUMAN ENVIRONMENT

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENV 310</td>
<td>Environmental Planning</td>
<td>3 cr.</td>
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<tr>
<td>ENV 322</td>
<td>Environmental Sociology</td>
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</tr>
<tr>
<td>ENV 324</td>
<td>Public Lands Policy</td>
<td></td>
</tr>
<tr>
<td>ENV 403</td>
<td>Wilderness Management</td>
<td></td>
</tr>
<tr>
<td>GEES 303</td>
<td>Environmental Conservation</td>
<td></td>
</tr>
<tr>
<td>PSY 363</td>
<td>Environmental Psychology</td>
<td></td>
</tr>
<tr>
<td>ENV 320</td>
<td>Environmental Economics</td>
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</tr>
<tr>
<td>ENV 321</td>
<td>Environmental Law</td>
<td></td>
</tr>
<tr>
<td>PSC 341</td>
<td>Politics of the Environment</td>
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</table>

d. TECHNICAL SKILLS

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<th>Credits</th>
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<tbody>
<tr>
<td>ENV 315</td>
<td>Planning Methods</td>
<td>2-4 cr.</td>
</tr>
<tr>
<td>GEES 321</td>
<td>Planning Processes</td>
<td></td>
</tr>
<tr>
<td>CNV 355</td>
<td>Principles of Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>ENV 455</td>
<td>Advanced Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEES 305</td>
<td>Topographic Map Analysis</td>
<td></td>
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<tr>
<td>GEES 302</td>
<td>Cartography</td>
<td></td>
</tr>
<tr>
<td>ENV 456</td>
<td>Surveying and Field Mapping</td>
<td></td>
</tr>
<tr>
<td>ENV 435</td>
<td>Habitat Analysis</td>
<td></td>
</tr>
<tr>
<td>ENV 347</td>
<td>Instrumentation and Water Quality Analysis</td>
<td></td>
</tr>
<tr>
<td>ENV 391</td>
<td>Intro. to Research and Environmental Computing</td>
<td></td>
</tr>
<tr>
<td>GEES 418</td>
<td>Computer Mapping and Geoinformation Systems</td>
<td></td>
</tr>
</tbody>
</table>

e. ENVIRONMENTAL SCIENCE ELECTIVES

15 cr.

15 credit hours of courses with ENV prefix, which may include internships, independent study or Senior Project.

B. COGNATE REQUIREMENTS

7 cr.

1. CHE 101 General Chemistry or
   PHY 101 Introduction to Physics
   4 cr.

2. One Computer Course by advisement
   3 cr.

III. ELECTIVES

30 - 34 cr.

122 crs.

IV. ADVANCED WRITING REQUIREMENT

3 cr.*

*Effective for students who enter the College as Freshmen beginning Fall 1984; Transfer students with 18 credits or less in Spring 1985, 36 credits or less in Fall 1985, 54 credits or less in Spring 1986; and all students entering in Fall 1986.

Total 125 crs.