

1978

Interdisciplinary Study: The Ideal and the Real

W. J. Reeves
Brooklyn College

Follow this and additional works at: <https://scholarworks.wmich.edu/perspectives>



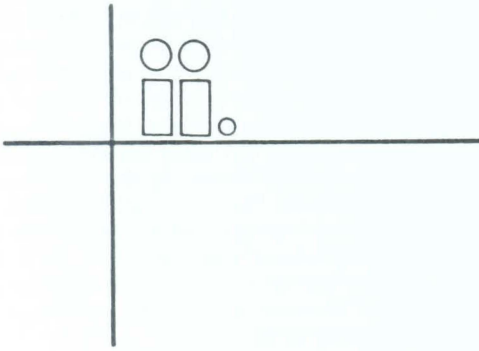
Part of the Higher Education Commons, and the Liberal Studies Commons

Recommended Citation

Reeves, W. J. (1978) "Interdisciplinary Study: The Ideal and the Real," *Perspectives (1969-1979)*: Vol. 9 : No. 3 , Article 4.

Available at: <https://scholarworks.wmich.edu/perspectives/vol9/iss3/4>

This Article is brought to you for free and open access by the Western Michigan University at ScholarWorks at WMU. It has been accepted for inclusion in Perspectives (1969-1979) by an authorized editor of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



INTERDISCIPLINARY STUDY: The Ideal and the Real

W.J. Reeves

This study will examine the various interdisciplinary programs in operation in major universities, focusing on the methods of organization and detailing the problems of existence of such programs.

There are many ways to organize interdisciplinary programs, but the following methods appear most often:

1. Significant Time Periods
2. Area Studies
3. Humanities and the Professions
4. Topics

A description of these methods is necessary.

The first organizational device to be examined is the *Time Period*. The thesis of this approach is that the selection of a certain period of time gives a program a definite structure and allows students to observe the various disciplines in operation in a controlled context. One such program is the New School of Liberal Arts (NSLA) at Brooklyn College of CUNY. In 1972 Brooklyn College created the New School of Liberal Arts, a two year program for freshmen and sophomores which has an interdisciplinary format.

NSLA offers 64 credits (of the 128 needed for graduation). The students there spend two years in the program and fulfill all requirements of general education. At the junior year they move into their major field of study. At NSLA a

student selects, each semester, one of five historical time periods (Ancient, Medieval, Renaissance, Age of Revolutions, 20th Century) and then takes four courses (Art or Music, Science, Literature, History/Philosophy) in that one time period. The faculty can easily coordinate their classes since they teach the same students. If a student would select 20th Century, he would have a schedule of art history or musicology, science (chemistry, biology or physics), literature, and history/philosophy, all of which would deal with the same period of time. Usually the faculty will keep the literature, art and history in the same area. Thus a history teacher who specializes in American history would team with a professor of literature whose concentration was 20th century American. For an example of a coordinated approach involving science and literature, see D.A. Labianca and W.J. Reeves, "Teaching *The Moonstone*: An Interdisciplinary Approach", *Exercise Exchange*, Fall 1975 or "Sherlock Holmes and his Compulsive Use of Cocaine", *Science Education* (Spring/1976).

The second type of organizational method — Area Studies — is closely related to the time period concept. The idea here is to focus the study on a particular area and, usually, a particular time. Examples would be the programs at Denver University and the University of Pennsylvania. At Denver University some 11 significant areas have been selected for study. Examples are as follows: Classical Athens, Mexico in the 20th Century, Sung China, France of the Enlightenment and Revolution. The format allows for detailed treatment of an important subject and affords opportunity for interdisciplinary teaching.

The University of Pennsylvania began an Area Studies program in 1975. Their program concentrates, in one semester, on one of several areas — Israel, China, India, Russia, Germany. The program is not meant to be an area for specialist training but is directed toward a general education objective. With each of the areas to be studied some aspects of Time Period organization are used. For example the module treating India focuses on India since 1947, the unit on Germany examines the rise of German Nationalism dating from the 19th century. One interesting part of the program is the introduction of language study. The German Area Module offers an intensive course in language, and this study is then related to the analysis of the culture.

Another method of organization is to coordinate a humanities program with a professional program. The University of Florida and Oregon State University have programs which relate humanities and the professions.

Oregon State University has a program entitled the *Humanities Development Program* with a specific concentration on humanities and the professions. The thesis of their program is explained by the following quotation from their bulletin:

We believe that students in the sciences and the professional schools need a better understanding of the values fundamental to their disciplines and increasingly fundamental to their future professional practices. At the same time we feel that students and faculty in the humanities need to acquire a better understanding of science and technology, since humanistic critiques of these fields must be informed by a thorough understanding of the nature and the impact of those pursuits.

The following are examples of some of the courses offered at Oregon State University:

Technology and Progress
History of the Professions
Ethics and the Professions
Bioethics
Seminar on Science, Technology and Community
Man as Machine

This program is slated to begin in 1979-80. The advantage of this type of organization for the humanist is that a definite group of good students is made available for the program.

The University of Florida also has a Humanities and Professions Program which began in 1975. The program at Florida relates the humanities and medicine, law, engineering and business. In their grant proposal the objectives of the program are established as follows:

The objective to be accomplished with NEH funds is the creation of a new liberal arts program of courses designed to relate the substance and the methods of the humanities disciplines to the issues and concerns of the professional fields.

The module involving the humanities and human medicine is especially interesting. It is directed toward incoming medical students. Quoting from their bulletin, the "Division of Social Science and Humanities within the Department of Community Health and Family Medicine is built on the conviction that what is needed is the introduction of the concepts, the perspectives, the methodologies and to some extent the materials of appropriate humanistic and social scientific disciplines into medical education."

Some of the courses offered in this program are as follows:

<i>Humanities and Human Medicine</i> —	Humanities and Medicine History of Medicine in U.S. Philosophy and Counseling
<i>Humanities and Law</i> —	Humanistic Perspectives on the Law Art, the Intellectual and the Law The Courtroom as Theatre
<i>Business</i> —	Human Images in Economic Thought

The final method of organization is the use of *Topics*. Three schools with interdisciplinary programs organized by the method of *Topics* are University of Notre Dame, San Francisco State, and University of Wyoming.

The program at Notre Dame is directed toward freshmen and has traditionally attracted pre-med students who want humanities courses other than freshman composition and literature survey. The following is the outline for the two-semester Freshmen Humanities Seminar at Notre Dame; the course is organized around the concept of a journey of the self.

- I. Initiation:
 - a. *The Epic of Gilgamesh*
 - b. Genesis 1-11

- II. Innocence and Experience
 - a. Hawthorne, *The Celestial Railroad and other Stories*
 - b. Burgess, *A Clockwork Orange*
 - c. Blake, *Songs of Innocence and Experience*
 - d. Shakespeare, *Othello*
- III. Fathers and Founders
 - a. Genesis 12-40 — Abraham, Isaac, Jacob
 - b. *The Autobiography of Malcolm X*
 - c. Exodus 1-24, Numbers 9-14, 20, Deuteronomy
- IV. Myth and Reality
 - a. *The Constitution of the United States*
 - b. *The Communist Manifesto*
 - c. *The Prince*
 - d. *Armies of the Night*
 - e. "The Apology": The Trial of Socrates
 - f. "The Crito" "The Phaedo"
 - g. "The Gospel According to Mark"
- V. The Individual Quest
 - a. "The Grand Inquisitor"
 - b. *A Portrait of the Artist as a Young Man*
 - c. "The Marriage of Heaven and Hell"
 - d. *Heart of Darkness*
- VI. The Fall
 - a. "Waiting for Godot"
 - b. *The Trial*
 - c. The Book of Job
- VII. Rebirth
 - a. *Siddhartha*
 - b. *Memories, Dreams, Reflections*
 - c. *The Rainbow*
 - d. *Fear and Trembling*
 - e. The Ninth Symphony

The attraction of this arrangement is the developmental aspect. Each part builds upon the previous part, and the students are truly taken on a journey.

San Francisco State has an interdisciplinary program entitled the Science/Humanities Convergence Program (NEXA). The program began in 1976 and will offer 18 courses by 1980. NEXA is open to any student within the University. Their "Topic System" is organized by the use of three groups of topics — Concepts, Sequences, Issues. Before taking the *Sequences Courses* it is recommended that a student take one of the *Concepts Courses* — "Cosmologies and Worldviews," "Mythic and Scientific Thought," "Time in Human Consciousness."

The *Sequences Courses*, while essentially topic courses, have a Time Period aspect. The courses are as follows:

The Copernican Revolution

The Newtonian Revolution
The Darwinian Revolution
The Einsteinian Revolution
The Freudian Revolution.

Completing the NEXA program are the *Issues Courses*: "Literature, Art and Physics," "Animal-Human Behavior," "Split Brain/Split Culture."

The method of instruction is primarily team-teaching. For example the Newtonian Revolution course features a professor of mathematics and a professor of English and subject matter ranging from Pope, Swift and Sterne to Newton, Locke and Bentham.

One special feature of the NEXA program at San Francisco State is the use of public presentations as a means of extending their "interdisciplinary mission." As one example NEXA offered the California Symposium on Science and Human Values which focused on the topic "Sociobiology: Implications for Human Studies" during the summer, 1977.

The final example of an interdisciplinary program organized by Topics is the Humanities Semester of the University of Wyoming. The program offers a cluster of interdisciplinary courses (9 or 12 Humanities credits) which focuses on a single topic. The program is open to all students who have completed 15 hours of credit and is offered the Spring Semester of each year. During the Fall, the faculty plan the course and recruit students. For Spring, 1978, the Humanities Semester focused on the topic of Time and was entitled *Studies in Time*. The program emphasizes the integration of the humanities and the sciences. The Humanities Semester also has a special feature. One week of the semester is set aside for a lecture series. This series, entitled the Practicum, extends the classroom consideration of the topic by means of guest lecturers, films, exhibits and performances.

These, then, are some examples of the "ideal" aspects of interdisciplinary study. To achieve these ideals many of the above universities have obtained large federal grants. At one time NEH offered grants up to \$1,000,000.00 for five years to support interdisciplinary programs. Today these grants have been scaled down to provide Planning Grants of up to \$50,000.00 for initiating programs and Development Grants of approximately \$100,000.00 a year for two to three years. As a university begins to apply for such grants, the ideal assumes less importance and begins to be overshadowed by the real.

Given the examples of success, any of the four methods explained above will work as the idea for an interdisciplinary program. The more important considerations are the real, nuts and bolts issues connected with the development of new programs. The following are "real" considerations which must be dealt with if an interdisciplinary program is going to survive:

1. The Level of the Students in the Program
2. The Goals of the Program
3. The Nature of the Faculty
4. Departmental Support
5. Administrative Support.

One of the first considerations in the planning of an interdisciplinary program is the level of students. Since the program will be taking its place with established programs, a spot must be found for it. If the choice is made to focus on freshmen and sophomores, then the ideal must be bent to that type of student.

Interdisciplinary study by its very nature is difficult. Its thesis is that a problem or topic can be examined better if more than one discipline is used in the analysis. Entering students have not mastered any discipline and will not bring to the classes any definite perspectives. Thus, the subject matter must be basic; the analyses and approaches modest in their demands. Further, if an attempt is made to fit an interdisciplinary program for freshmen/sophomores, then the spectre of skills appears. Such courses would be equivalencies for introductory courses and thus would have to assume the same responsibility for teaching writing, reading, mathematics, appreciations, etc. as do the other introductory courses. If the courses do not assume such responsibility, then they will not be granted requirement-satisfying status and students will not take the courses. Classes aimed at upperclassmen also encounter problems. Students at the upper divisions level usually have full schedules. Thus the interdisciplinary classes will be used as electives. There is some difficulty in accomplishing significant interdisciplinary work in one three-hour class offered to students with four other classes. The interdisciplinary course will be regarded as of fringe importance and time, effort, and status will be given to the courses in the student's major field.

Any interdisciplinary program must identify definite goals which students and faculty will perceive as worthy. Interdisciplinary courses should fulfill general education requirements or they should lead to a major or minor concentration. The programs cannot survive if they are presented as "interesting," "innovative," "experimental," "a change from structure," etc. Those bromides might have worked in the 1960's but today new courses must have academic worth or degree-generating potential or they will not be supported.

But say that a good idea was available and that grant money was obtained and that a group of students was identified and that worthy goals were established, who would teach such courses? This is the most difficult of the real considerations. Grants do not pay salaries. They will provide teaching assistants, secretaries, equipment, rentals, guest lecturers, faculty travel and the like, but they will not pay the university for faculty to teach in the programs. Two options are open: the university can hire new faculty to teach in the programs; the departments can release faculty to the programs. The latter is the normal solution. What a headache is released time! First of all, the departments will be reluctant to release faculty. They will perceive that if they release faculty they are notifying the administration that they are overstaffed. Second, the faculty members who are released will still have departmental requirements. New courses take time away from research and since research is necessary for success in the university many faculty members see participation in new programs as harmful. Third, released faculty are not permanent faculty. Thus interdisciplinary programs experience a great deal of turnover and do not achieve the stability needed for success.

This matter of released time leads to the next point — departmental support. The humanities are in trouble in universities — that is a fact. Each year the enrollments in non-required courses go down. Any new program which has courses which are equivalencies for existing courses will be viewed as a challenge by the departments, and every effort will be made to sabotage the programs. Poor faculty will be donated; advisors will criticize the program or simply not mention it; department chairmen will inveigh with deans and vice-presidents that interdisciplinary programs are just fads and that what is

needed are more survey courses. Anyone planning an interdisciplinary program must first secure the support of the departments or failure is inevitable. The way to secure such help is to create a program which will bring new students to humanities classes. Most humanities departments, English in particular, would be amenable to interdisciplinary courses which could attract students at the upper-division level. The difficulty here is that a balance must be found between satisfying departments and attracting students.

But the successful planner cannot rely only on departmental support. The senior administration must support the program in word and deed. If pressure is needed, then a strong arm must be found. In every one of the successful programs listed above, support from the senior administration was present. If a department has constantly been experiencing a decline in students in non-required courses, then a change must be made. But departments change only on the threat of death. A Dean or a Vice-president is needed to step in and "advise" the department to support the interdisciplinary program with good people, good advising and advertisement.

What would be an example of a good area for an interdisciplinary program? I would advise a sophomore level core of courses involving humanities and the sciences organized around a topic. Why sophomores? In terms of an English Department the new program would not compete with their bread and butter course — freshman composition. Further, most universities have a humanities/fine arts requirement so the new course could be required. Which science? Physics. Why? Well, most physics departments have little for their physicists to do in terms of teaching so released time is usually possible. And physicists can range from ancient times to the present in terms of subjects and thus have ready-made content for coordination with the humanities. Finally, physics is difficult and respected in the university. No one will accuse a program of being superficial and gimcrack if Tycho, Newton and Rutherford are on the syllabus. Why topics? With topics small blocks of interdisciplinary courses can be offered. If the interdisciplinary program is too large, it will interfere with existing programs. A team-taught, coordinated block of two classes (six hours) will not distort a student's program. The two-class block is large enough to be significant but not large enough to discourage students from taking the courses.

As discouraging as some of the above comments are, the possibilities are still good for interdisciplinary study. Most educators would admit that general education is a shambles. Interdisciplinary programs can provide the needed general background. What is needed for success is a recognition of the ideal and real aspects involved with interdisciplinary study.