### DOCUMENT RESUME

ED 245 768 JC 840 390

TITLE Interdisciplinary Studies Program. Introduction to

Teacher's Guide.

INSTITUTION Valencia Community Coll., Orlando, Fla.

SPONS AGENCY National Endowment for the Humanities (NFAH),

Washington, D.C.

 PUB DATE
 31 May 84

 GRANT
 EH-20175-82

NOTE 22p.; For related documents, see JC 340 391-394.

PUB TYPE Reports - Descriptive (141) -- Guides - Classroom Use

- Guides (For Teachers) (052)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Achievement Gains; College Curriculum; Community

Colleges; \*Core Curriculum; \*General Education; \*Interdisciplinary Approach; Program Descriptions;

\*Program Development; Two Year Colleges

### **ABSTRACT**

An introduction is provided to the Interdisciplinary Studies (IDS) Program at Valencia Community College (VCC), a 2-year general education core curriculum divided into four courses. A description of VCC is followed by an overview of the program, which integrates the arts, philosophy, religion, English, mathematics, social sciences, and physical sciences in a chronological framework which examines the major developments in the evolution of human knowledge. Next, a rationale and brief history of the program are presented, followed by a statement of its general goals, i.e., knowledge and intellectual development. Next, an outline is provided of the units of each of the four courses, which focus on: (1) the evolution of abstract thinking and critical inquiry during the Classical Greek period; (2) the Judeo-Christian world view, the scientific revolution, and the development of states; (3) the growth of the capitalist economy and its philosophical products from 1800 to 1950; and (4) the effects of modern science and technology and the direction in which it is taking mankind. The next section focuses on the methodology employed in the program and lists 18 reasoning competencies addressed. Testing and grading procedures are discussed prior to an enumeration of the responsibilities of staff and students. Finally, information is presented on the performance of IDS program graduates on the College Outcome Measures Project test. (AYC)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



# TEACHER'S GUIDE

for the

# Interdisciplinary Studies Program Valencia Community College Orlando, Florida

"PERMISSION TO REPRODUCE THIS MATÉRIAL HAS BEEN GRANTED BY

J. L. Schlegel

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (FRIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

# Chairman: J. Louis Schlegel, III

Prepared with a grant from the National Endowment for the Humanities EH-201.75-82 May 31, 1984



## INTRODUCTION TO TEACHER'S GUIDE FOR THE INTERDISCIPLINARY STUDIES PROGRAM

### PREFACE

This is a detailed guide to the Interdisciplinary Studies Program at Valencia Community College. This guide includes:

- 1. An introduction to the program, including:
  - a. a description of the college
  - b. a description of the program
  - c. a rationale and brief history of the program
  - d. . the general goals of the program
  - e. the content of the program
  - f. the methodology of the program
  - g. a report on entry/exit testing of students
- 2. An introductory overview to each semester's work including its breakdown into units.
- 3. An introduction to each unit.
- 4. A discussion of each topic within each unit, including the methodology and main points stressed.
- 5. An appendix of student papers showing students work in each unit during each semester.

This manual should be used in conjunction with the text materials compiled by the Interdisciplinary Studies faculty at Valencia.

### DESCRIPTION OF VALENCIA COMMUNITY COLLEGE

Valencia Community College, a multi-campus institution, was established in 1967 to serve the Central Florida counties of Orange and Osceola. This two county district has a combined population of approximately 500,000. The college, based in Orlando, has two physical campuses providing comprehensive A.A. and A.S. degree programs, with a full-time equivalent enrollment of approximately 11,100 students. An additional 27,000 citizens are served annually through the Open Campus, the continuing education, community outreach component of the college, which offers classes in over 170 locations throughout the district, as well as specialized programs for targeted constituencies.

### DESCRIPTION OF THE INTERDISCIPLINARY STUDIES PROGRAM

The Interdisciplinary Studies Program at Valencia Community College is a two-year general education core-curriculum divided into four, 6 semester-hour courses (IDS el101, 1102, 2103 and 2104). The Interdisciplinary Studies Program is a teamtaught program which integrates the arts, philosophy, religion, English, mathematics, social sciences, and physical sciences in a chronological framework which examines the major developments in the evolution of human knowledge.

Below is a comparison of Valencia's traditional requirements for general education and the requirements for Interdisciplinary Studies students.



TRADITIONAL Requirements

INTERDISCIPLINARY STUDIES
Requirements

6 hrs. Communication

3 hrs. Mathematics

6 hrs. Social Sciences

6 hrs. Science

9 hrs. Humanities

6 hrs. General Education Electives

36 hrs. General Education Requirements

PLUS

24 hrs. electives

60 hrs. for A.A. degree

24 hrs. Interdisciplinary Studies in General Education (IDS 1101, 1102, 2103, 2104)

12 hrs. General Education electives, including Political Science (POS 1041)

36 hrs. General Education Requirements

PLUS

24 hrs. electives

60 hrs. for A.A. degree

(Students are expected to complete the two-year sequence but if they cannot, their IDS credits are converted to course credits in the traditional general education program according to a formula arranged with the Registrar.)

The faculty consists of five, full-time Interdisciplinary Studies instructors. Two instructors are from the humanities, one is from social science, and two are from English disciplines. Each instructor selects the material to be presented from his area from a collection of core materials; however, all instructors are responsible for teaching all subjects. For example, everyone teaches mathematics and everyone teaches humanities. The faculty is a team of dedicated generalists who share a unified philosophy of general education and a mastery of effective classroom teaching techniques. This combination of format, faculty and material makes this program unique.

### RATIONALE AND BRIEF HISTORY OF THE INTERDISCIPLINARY STUDIES PROGRAM

When getting a good education meant getting a liberal education, humanities was the backbone of the first two years of higher education. Through humanities, a student acquired competence in critical, reflective thinking, synthesizing and integrating knowledge, as well as knowledge of the continuity of history and culture. These competencies and this knowledge were considered essential preparation for success in upper division course work, for employment after college, and for experiencing a more meaningful life.

However, the post-war technological boom began to change the nature of our institutions of higher learning and getting a good education began to mean being trained and immediately employable in a specialized profession. The humanities were no longer seen as central to a student's program and conceptual, interdisciplinary courses were quickly replaced by introductory courses in specialized disciplines. As disciplines sought and became even more specialized, the emphasis of these introductory courses shifted to acquiring basic vocabulary and to acquiring the methods and background information for the future study of the specialty. While the mastery of vocabulary, information and methodology is an important part of education, the ability to analyze and evaluate is equally important. Of what use are quantities of facts if the student cannot perceive patterns within those facts, draw inferences and apply logical processes? As humanities courses disappeared from the curriculum so did the competencies and



.

knowledge they provided. New courses did not fill the vacuum they left. In fact, disciplines became increasingly more self-contained, and the first two years of college became more fragmented and compartmentalized. As a result, the sense of the interrelatedness of knowledge was lost. Fortunately, educators have begun to realize these developments in higher education enslaved students rather than liberated them.

Concerned about these developments, faculty and administration at Valencia Community College came together to rethink and re-examine the general education curriculum at Valencia. A survey of faculty and administration revealed unanimous agreement that competence in critical analysis, synthesis and integration, as well as knowledge of history and culture, were important parts of a good education. While faculty and administration agreed in theory, little was being done to implement this theory. Some faculty were aware of the history of their discipline, but few could connect it to broader cultural patterns and fewer still incorporated any of this into their courses. Most required courses were structured to assess only lower level cognitive skills - mainly recall and recognition - with very few even approaching analysis or synthesis. The saddest part was that while most faculty agreed that competencies in analysis and synthesis were essential, hardly any felt that this could be taught to freshmen or sophomores.

A college-wide committee of faculty and adminstrators was formed to explore the possibilities for revising general education courses at Valencia. J. Louis Schlegel III, Chairman of the Humanities Department, was appointed Chairman. (The Humanities Department had begun to address this problem several years earlier and had begun extensive changes in curriculum and innovations in methodology which returned analysis, integration and synthesis to the core of their humanities courses.) The committee decided to design an experimental approach to general education into a single program whose core and focus would be the humanities.

Six faculty members volunteered to design the program. The college released them from teaching duties for six months during which they designed the first Interdisciplinary Studies Program. The faculty decided that greater continuity could be maintained if the same students participated in the program for 4 semesters over a two-year period. It was also decided to provide a longer block of time - 3 hours, 2 days a week - so that time could be used more creatively. After intensive reading, researching and studying it was decided to examine the major historical developments in human knowledge: the Classical period, the Renaissance and the effects of the scientific revolution; the development of Rationalism and Determinism; and the Twentieth Century. It was felt that these developments were important to understanding the role the past has played in shaping the future. It was also decided to place special emphasis on the twentieth century and futuristic studies since any education should also point students toward the future. Materials were collected, correlated and became basic texts for the four courses. The program was pilot-tested the following year, reassessed and then pilot-tested again. The results were that students not only gained the competence and knowledge required for success in their future education, but their development exceeded expectations. Both instructors and students felt liberated.

In the meantime, faculty from colleges and universities referred by consultants for the NEH, began to visit Valencia to examine its humanities program and were exposed to the Interdisciplinary Studies Program. They were extremely impressed by the Interdisciplinary Studies Program, but almost unanimously felt that their



integrate these disciplines. A common response was, "I'd surely like to be a student in this course." From their responses, the idea was born to write a comprehensive <u>Teacher's Guide</u> which would explain the philosophy, organization, manner of presentation and rationale of every part of this program. Since then the program has evolved into an Honors Program for bright freshman who elect to take it rather than the traditional path to the A.A. degree. It is still team-taught by five professors. Three are permanent faculty and two positions are available as 1/2 of a regular teaching load to any faculty within the college who would like to participate. Faculty during the period this guide was being written were:

Carol Ancona, Professor B.A., M.S. English/English Education

Ron Brandolini, Professor B.A., M.A. Economics

Grace Kehrer, Professor
B.A., M.A., Ed.S. Philosophy/Literature/Education
(Permanent Faculty)

J. Louis Schlegel III, Chairman B.A., M.A. Music/Humanities (Permanent Faculty)

Roberta Vandermast, Professor B.A., M.A. Social Science/Humanities (Permanent Faculty)

# GENERAL GOALS OF THE INTERDISCIPLINARY STUDIES PROGRAM: KNOWLEDGE AND INTELLECTUAL DEVELOPMENT

The two goals of IDS, knowledge and intellectual development, have been carefully woven together in planning the two-year program. The knowledge students will gain will be knowledge of the cultural, intellectual and scientific heritage of Western man. The intellectual development they will experience equips them to be successful in furthering their education or careers.

At the same time, they are tracing the intellectual history of Western man, they will also be sharpening and strengthening their intellectual skills. They master reading, reasoning, speaking and writing skills which will help them understand what they are learning. These skills are the mark of an educated person and are the skills which college professors expect in their junior and senior students as well as those which businessmen look for in their employees.

### CONTENT OF THE INTERDISCIPLINARY STUDIES PROGRAM

Each of the four courses in the Interdisciplinary Studies Program centers on one of the major developments in human knowledge.

The first period includes the evolution of abstract thinking and critical inquiry during the Classical Greek period (about 700-300 B.C.). During this time, the Greeks developed logic, natural science, philosophy, rhetoric and government to such a degree that they influenced European history centuries after their civilization fell and continue influencing our world today. Students study about this Greek genius for creativity in IDS 1101 during the Fall Semester of the first year. IDS 1101 includes:



Developing Reading, Reasoning, Speaking and Writing Skills Unit 1;

> Jonathan Livingston Seagull by Richard Bach Developing Skills:

Developing Skills: Identifying and Defining Concepts Developing Skills: Defining and Applying Concepts

Preparing for the Test Developing Skills:

Unit II: Logic

Form and Function of Language

The Four Forms

The Three Functions

Quantity, Quality and Type

Distributed and Undistributed Terms

Categorical Syllogisms Premises and Conclusions

Unit III: The Golden Age of Athens

The Graeco-Persian Wars

Greek Democracy Greek Idealism

"The Memorial Oration of Pericles" by Thucydides

The Parthenon

The Athenian Economy and the Rise of Athens (lecture)

Greek Sculpture

Antigone by Sophocles

The Decline of Athens Unit IV:

The Peloponnesian War

The Decline of Athens

The Lpology by Plato The Crito by Plato

The Clouds by Aristophanes

Greek Sculpture Alexander the Great,

The Hellanistic World

The Altar of Zeus at Pergamum

Unit V: Greek Philosophy

"Levels of Reality: The Theory of the Divided Line and the Allegory

of the Cave" by Plats

"The Golden Mean" by Aristotle

"Ethics" by Aristotle

Epicurean Ethics

"Letter to Menoeceus" by Epicurus

The Meditations by Marcus Aurelius

The Manual by Epictetus

"On Providence" by Seneca

"On Suicide" by Seneca

The Mythic Dimension Unit VI:

The Delphic Oracle

"The Delphic Oracle as Therapist" by Rollo May

"The Adventure of the Hero" by Joseph Campbell

The Odyssey by Homer

The Adventure of the Hero



Unit VII: Greek Science

"The Values of Science" by Richard Feynmann
"An Overview of Greek Science" by Fritjof Capra
The Philosophy of Change -- Heraclitus
The Philosophy of Permanence -- Parmenides
The Philosophy of Accommodation -- Democritus
On the Nature of Things by Lucretius
Aristotle's Science
The Ptolemaic System
Ptolemy, the Influence of the Stars

In IDS 1102, students study the second part of this intellectual evolution. This semester's study begins with an examination of the Judeo-Christian world view which dominated Western thinking after the fall of the Classical world and ends with the scientific revolution spawned by the Renaissance. IDS 1102 includes:

Unit I: A Theological World View

The Book of Job
The Apostle Paul
The Epistle of Paul to the Romans
Religion and Western Culture
Saint Augustine

The City of God by Saint Augustine The Rise of Christian Art

Te Deum Laudamus

Unit II: Theological Humanism

The Creation of Europe: Political and Social Foundations
The Flowering of Medieval Culture: The Rise of Universities
Peter Abelard
Abelard and Heloise
Summa Contra Gentiles
The Renaissance - An Overview
"Mathematics and Painting in the Renaissance" by Morris Kline
Giovanni Pico della Mirandola
"Oration of the Dignity of Man" by Pico della Mirandola

Michelangelo: The Last Giant (film)
The Sistine Chapel Ceiling (diagram)
Sonnets by Michelangelo

Sonnets by Michelangelo

Unit III: The Reformation and Counter-Reformation

The Reformation Martin Luther

"Ninety-Five Theses" by Martin Luther

"The Freedom of a Christian" by Martin Luther`

The Counter-Reformation

"Spiritual Exercises" by St. Ignatius Loyola

Autobiography of St. Teresa of Avila

Counter-Reformation Art: St. Peter's Basilica

Protestant Music: Handel and Bach

Unit IV: The Scientific Revolution

Nicolaus Copernicus

De Révolutionibus Orbium Caelestium by Nicolaus Copernicus



Leonardo da Vinci
Tell Me If Anything Was Ever Done (film)
Johannes Kepler
Kepler's Science
"The Harmony of the Spheres" ("Cosmos" episode)
Galileo Galilei
"Letter to the Grand Duchess Christina" by Galileo
Galileo's Science
Galileo by Bertold Brecht (film)

Unit V: The Old State and the New State

"The Princes and the Powers of the Italian Renaissance"

The Prince by Niccolo Machiavelli
"Macbeth" by Shakespeare

Candide by Voltaire

Candide (videocassette)

John Locke

"An Essay Concerning the True and Original Extent and End of Civil
Government" by John Locke

Unit VI: The Development of the Scientific Method
Introduction: Rene Descartes
"Discourse on Method" by Rene Descartes
Sir Francis Bacon
Novum Organum by Sir Francis Bacon
Perspectives: Newtonian Synthesis
Preface to the First Edition of the Principia Mathematica by
Sir Isaac Newton
General Scholium of the Principia by Sir Isaac Newton
Scholium of the Principia by Sir Isaac Newton
Newton's Science

Semester II emphasizes the growth of the capitalist economy and its philoso- phical products: the rise of individualism, the demand for political independence, and scientific objectivity. It is followed by IDS 2103 which will cover the third period (from 1800-1950) when the tree of contemporary science bloomed and the fruits of contemporary science were harvested. This semester sees man's image of himself challenged from every arena--biological, psychological, philosophical and political. IDS 2103 includes:

Unit I:

Determinism and Indeterminism
"The World As Clockwork Mechanism"

"Tintern Abbey" by William Wordsworth

Kant's Epistemology: Objectivity and Subjectivity

Painting by Eduoard Manet

Impressionism: Mary Cassatt

Impressionism: Claude DeBussy

The Wealth of Nations by Adam Smith

The Communist Manifesto by Karl Marx and Friedrich Engels

An Essay on the Principle of Population by Thomas Malthus

The Origin of the Species by Charles Darwin
"Man is Free" by William James

7

"The Grand Inquisitor" by Fyodor Dostoevsky
Fear and Trembling by Soren Kierkegaard
Musical selections by Richard Vagner
Thus Spake Zarathustra by Friedrich Nietzsche

Unit II: Major Theories in Modern Psychology
"Some Elementary Lessons in Psychoanalysis,"
"On the History of the Psychoanalytic Movement," "An
Outline of Psycho-Analysis," and "Psycho-Analysis and
Man's Sense of His Own Self-Importance" by Sigmund Freud
"Individual Psychology" by Alfred Adler
"Man and His Symbols" by Carl Jung
"Man - The Machine" by B. F. Skinner

Unit III: A Social Science Research Report

Unit IV: Relativity and Its Effects

Einstein for Beginners, Joe Schwartz and Michael McGuinness
"The Search for Visual Unity", Paul Cezanne (selected works)
Picasso and Cubism
"Statement to Marius de Zayas" by Pablo Picasso
"Spatial Music" by Edgar Varese
"Burnt Norton" by T. S. Eliot

Unit V: Existentialism
The First World War and the Decline of Europe
Mein Kampf by Adolf Hitler
Man's Search for Meaning by Viktor Frankl
Being and Time by Martin Heidegger
"The Seventh Seal" by Ingmar Bergman
"Existentialism is a Humanism" by Jean-Paul Sartre
"Altered States" (film)

Finally, IDS 2104 does three things: (1) it reflects back over all the students have studied and it synthesizes what has been learned, helping to pull everything together; (2) it asks students to project forward--to think about what the future may be like; and (3) it requires mastering the technique of writing a literary research paper. In IDS 2104, students study the effects of modern science and technology and the direction in which it seems to be taking us. In IDS 2104, four or five complete books are focused on for discussions. While the content of IDS 1101, 1102 and 2103 does not vary much from year to year, the content of IDS 2104 does because a selection is made of some of the most current books about this fourth period in our intellectual history. Books that have been studied in this IDS program are:

Zen and the Art of Motorcycle Maintenance by Robert Pirsig

Lord of the Flies by William Golding

The Tao of Physics by Fritjof Capra

Dune by Frank Herbert

### METHODOLOGY OF THE INTERDISCIPLINARY STUDIES PROGRAM

The central core of-general education should prepare a student to think and read critically, and to organize ideas with clarity in writing and speaking. Students who master these competencies are prepared for study in any specialized discipline and are also able to make better decisions in all phases of their lives. We realize that the study of humanities is especially suited

to accomplish these competencies if the content is organized and presented in such a way that the skills are an inevitable outcome of the learning process.

In 1978, A. B. Arons' identified the reasoning abilities college professors expected their students to have. This list of 18 abilities is solclose to the thinking of the Valencia staff on this that his list has been adopted. These competencies involve knowledge, communication and synthesis. These 18 competencies are:

- 1. The ability to locate key ideas, thesis statements and/or topic sentences.
- 2. The ability to paraphrase key ideas or key passages (without distorting the idea and taking into account the context of the idea).
- 3. The ability togcomprehend a literal meaning, and then move to a symbolic or implied meaning.
- The ability to separate evidence from inference and to identify the kinds of evidence provided.
- 5. The ability to recognize underlying assumptions,
- 6. The ability to recognize the different types of reasoning: inductive, deductive, intuitive.
- 7. The ability to view an idea and its exposition as a whole. To see the relationship of key ideas to their medium of expression.
- 8. The ability to grasp the symbolic nature of language (verbal or representational).
- 9. The ability to translate from one form of expression into another.
- 10. The ability to understand and use ratio reasoning.
- 11. The ability to understand the relationships and principles within a formula and draw inferences from it without performing a numerical calculation.
- 12. The ability to recognize and control variables in an experimental setting.
- 13. The ability to evaluate the clarity of other's work as well as one's own. The ability to judge when sufficient information is presented and when information is presented clearly.
- 14. The ability to formulate one's own line of reasoning by drawing inferences from data and evidence.
- 15. The ability to visualize hypothetical outcomes of specific systems and/or being able to carry a line of hypothetical reasoning to its conclusion.
- 16. The ability to check personal reasoning for internal consistency; to check it by alternate paths of reasoning, and to examine limitations of this kind of thinking by constructing extreme examples.
- 17. The ability to express one's own ideas in a variety of modes (i.e., essay; poem, speech).

18. The ability to choose and affirm ideas which are found personally satisfying.

WThis was part of a paper developed for the Symposium on Learning held at Phillips Academy in Andover, Massachusetts.

These competencies define the learning process itself and transcend the boundaries of separate disciplines. Most instructors assume their students can do these things. However, the staff realized that although the students read on a 'narra" tive level, they are unable to make philosophical or symbolic interpretations of the narrative events. In order to get them to begin interpreting philosophical and symbolically, we ask them to underline statements which they feel might conmain deeper meaning. Too simple? It might appear so, but experience has shown that this simple activity results in class discussions of much greater sophistimication and complexity.

Most of the students who are unable to make philosophical relationships lack the ability to provide context for those statements. Most teachers would assume that a student discussing a statement would know who said it, when, and under what circumstances, but this is not so. The lack of that understanding makes it impossible for students to discuss a statement philosophically. Knowing that a quotation out of context can be very misleading, the next step in skill development is a careful description of context.

Deriving the philosophical meaning of the statement logically follows. This requires a change in thinking patterns, and the use of thinking skills that many students have not exercised before. It requires an understanding of varied meanings and shades of meaning and the ability to interpret ideas symbolically. This is difficult for most students to learn; experience shows that it requires about four weeks of carefully structured discussion and writing activities to begin learning this thinking pattern. Recognizing that these competencies develop sequentially, they are incorporated into the lesson plans. Therefore, at this point, overarching philosophical concepts are introduced and presented as dialectical pairs - for instance objective/subjective, or perhaps, finite/infinite. Students learn to define these abstract concepts in their own words, and after reaching a philosophical interpretation of a statement, they learn to recognize the abstract concepts within it.

Then the student explains and clarifies the relationships that exist between all the parts of the response. The testing procedure is a demonstration of these skills and follows this outline:

- 1. Select a substantive quotation.
- 2. Identify context (who said it to whom, under what circumstances).
- 3. Interpret (what is the real meaning of the quote?)
- 4. Select an appropriate term (which overarching phrlosophical concept does it illustrate?)
- 5. Define the related term.
- 6. Explain the relationships between 1, 2, 3 and 5.

This is a description of the initial stages of the first course in the Inter-disciplinary Studies Program. An organized process like this requires practice and discipline. The use of dialectical concepts is carried throughout the course, but the content of each unit varies. Once students can handle this process successfully the staff can begin to raise the level of difficulty, abstraction and complexity. For example:

- 1. Teach the process of explication.
- 2. Use comparison/contrast activities in connection with explicated articles.

- 3. Establish thematic ideas and require synthesis from a variety of interdisciplinary subjects.
- 4. Study articles which present an inductive process of reasoning.
- 5. Study articles which present a deductive process of reasoning.
- 6. Teach students to recognize underlying assumptions and analyze conclusions in light of those assumptions.

These competencies develop best in a classroom where there is much opportunity for verbal participation. Formal lectures where the teacher explains ideas, where the teacher is the one who must be organized and prepared, don't help, students acquire these skills. Certain types of questioning do provoke the kinds of thinking this program is after. For example, if a student is asked, "What did Antigone say to Ismene at the beginning of the play?" Nothing but a factual narrative reply would be expected. But if we asked, "Why do you think Antigone said this?" Three or four possibilities can be elicited from the class and these answers form the basis of a good exploratory discussion. Small groups organized for specific purposes or for sharing written exercises encourage the exchange of ideas. In these group activities, one of the most important ideas which emerge is that there is no one "right answer" and that by thoroughly exploring relationships and exchanging interpretations students develop the complexity and depth that enhances their reading and thinking. Exchanging test papers to read teacher comments and to see the variety of different answers that are given is another technique which helps students immeasurably. The classroom environment created is one where students can gain confidence in their growing skills and discover their own strengths and weaknesses.

As teachers there is always the lament that, "just when we get things going the semester is over:" In the Interdisciplinary Studies Program instructors have the same students for four semesters. This gives them the benefit of students who know them and each other, students who have common reference points and students who are developing the skills and attitude necessary for good scholarship. Therefore, students can be directed towards much higher levels of mastery than is generally possible. It is found that students can and do take greater responsibility for their learning.

At the same time that a structured framework for learning is being provided, stuedents are also provided with an environment rich in learning experiences. Included are:

- 1. Panel discussions by students and/or faculty from the program.
- 2. Individual research into complex areas.
- 3. Guest lectures with questions and answer follow-ups.
- 4. Small group projects.
- Performances, lectures and demonstrations from the creative arts.
- 6. Performancés and demonstrations by creative students.
- 7. Field trips.

While this is only a brief sketch of the methodology of the Interdisciplinary Studies Program, this methodology is unique, creative, and has been highly successful. (More detailed information about the methodology used in each unit and each topic is included in the entries which follow this introduction.



### TESTING AND GRADING:

Students have several different kinds of tests in IDS. Some are short, objective quizzes to test comprehension of facts. Others are graded assignments that are done at home. Many are essay tests which cover entire units. In any event, every test or written assignment is announced on the course outline which students receive at the beginning of each unit. In addition, students always receive a set of detailed instructions for each test or assignment and, in the case of essay tests, receive the question(s) and the criteria for grading the papers in advance.

Assignments and tests are graded by the current small group discussion leader. As students change discussion groups, the person grading their paper changes. Any student dissatisfied with any grade received may ask any other staff member(s) to re-grade his/her paper.

After each paper is graded, it is returned to the student to examine. It is then collected again and becomes part of their permanent IDS file. They can look through this file at any time. When a student finishes the IDS program, his/her file will be returned to him/her to keep.

These graded papers are kept on file to help the faculty arrive at the final grade for each student. To determine this final grade, the staff first examines the grades on each of the units. Then they examine the students' progress in the course since they expect him/her to improve and know that some skills take many weeks to master. For example, if a student began with a "C" average in Unit I, moved up to a "B" in Units II and III, and then made "A's" in Units IV, V and VI, his/her grade for the semester would be an "A" because he/she finished the course by demonstrating excellent knowledge and intellectual development.

Copies of student tests appear in an Appendix at the end of each semester's Teacher's Guide.

### RESPONSIBILITIES OF THE STAFF

An IDS staff member's responsibility is to:

- 1. Carefully plan the material studied and the assignments given to help students gain knowledge and develop intellectually.
- 2. Prepare thoroughly. Do your homework.
- 3. Present the material studied in a clear and interesting manner.
- 4. Prepare tests which are relevant. Grade them fairly according to established criteria. Return them as promptly as possible.
- 5. Be available to help students understand what they are being asked to study and do.
- 6. Arrive on time for class. Utilize all the allotted class time.
- 7. Maintain an orderly atmosphere in the classroom so that the maximum learning can take place.
- 8. Treat each student as an individual and help each student learn to his/her maximum.



14

### RESPONSIBILITIES OF THE STUDENTS:

A successful learning experience is like a contract between teacher and student. Faculty responsibilities, are listed above, below are the students responsibilities. They are expected to:

- 1. Be prepared. Read their assignments. Do their homework.
- Come to each class. Arrive on time and plan to stay the entire time.
- 3. Participate in class discussion. Ask questions when they don't understand. (Only those students who are prepared are allowed to participate in class discussion.)
- 4. Consult the course outline frequently so that they are informed about assignments and class schedules.
- 5. Pick up any handouts they miss.
- 6. Prepare adequately for tests. Take them at the scheduled times. Turn in assignments on time.
- 7. Listen carefully in class. Take adequate notes. Keep all their IDS material together in an IDS notebook.
- 8. Bring their IDS notebook and the appropriate text(s) to each class meeting.
- 9. Respect other students' right to learn and control in-class behavior accordingly.
- 10. Budget their time so that they will be able to meet all their responsibilities: home, school and work.
- 11. Get additional help from the staff or other students when they are having trouble with a subject or assignment.

### IDS TAPES

Cassette recordings are made of each large group lecture/discussion. If any students are absent and would like to listen to the lecture or if they would like to listen to any lecture again, these tapes are available to them. They may listen to them or bring a blank cassette and have it copied on the highspeed copier in the library.



Interdisciplinary Studies Project Valencia Community College Director: J. Louis Schlegel III

### DESCRIPTION OF ENTRY/EXIT LEVEL TESTING

The College Outcome Measures Project (COMP) was begun in 1976 by The American Testing Program (ACT) at the regrest of some community colleges, four year colleges and universities. It is a testing program that measures student competencies. This test has been given to entering freshmen, exit sophomores and exit seniors at these institutions. As a result, a national norm has been established.

Beginning in September of 1981, the Valencia Interdisciplinary Studies will administer the (COMP) Test to the entering freshmen in the I.D.S. Program. These students will also take the sophomore exit test in the spring of 1983. These tests will be evaluated against the national norm on all levels and the results will be documented in Phe Teacher's Guide and discussed at the 1983 workshop.

### COMP PROSPECTUS

Overview, September, 1980

The American College Testing Program (ACT) organized the College Outcome Measures Project (COMP) in 1976, as a response to the growing need for new ways of assessing student learning. ACT's goal was to design, develop, validate, and implement assessment instruments and procedures to measure and evaluate certain kinds of knowledge and skills that undergraduates are expected to acquire as a result of general education - the knowledge and skills that are believed necessary for successful functioning in adult society. COMP incuses on six such areas of general knowledge and skills: Communicating, Solving oblems, Clarifying Values, Functioning within Social Institutions, Using Science and Technology, and Using the Arts.

### Objectives of COMP

Increasing numbers of postsecondary institutions have become aware of the importance of carefully specifying the general knowledge, skills, and attitudes their graduates must have to function effectively as adults. Along with this awareness has come recognition of the need to assess accurately student achievement of such general knowledge, skills, and attitudes. Virtually all colleges and universities have felt pressure, in recent years, to convince students and the public alike that general education programs successfully prepare students to function effectively in adult society - pressure, in other words, to demonstrate the "relevance" of general education.

There are at least three other reasons for the growing interest in assessing educational outcomes. Many institutions would like to reshape their curricula and design more effective learning activities to help students obtain the knowledge, skills, and attitudes necessary for adult functioning. Other institutions are concerned with helping students use existing general educational programs in ways that will best prepare them to achieve their personal and professional goals in life, as well as to meet the expectations of society. Institutions find that only through assessment of educational outcomes can they ensure that students are teaching general education goals and are receiving appropriate credit and recognition for doing so.

In attempting to assess general knowledge, skills, and attitudes, however, institutions have experienced many uncertainties about how to develop appropriate instruments and procedures.



Which kinds of knowledge, skills, and attitudes are necessary for successful functioning in adult roles? How can postsecondary institutions develop these competencies in students? And how can any of this be demonstrated?

Once the necessary kinds of competence are identified, what level of competence is sufficient?

Given the fact that most of the tests commonly used in postsecondary institutions were not specifically designed to measure the ability of students to apply knowledge, skills, and attitudes to adult life situations, what plausible assessment alternatives should be explored?

If assessment instruments other than objective tests are used, how can objectivity and reliability be assured?

If the assessment procedures are to approximate adult life situations and tasks more closely, what criteria should be established for selecting or creating stimulus materials and test questions? For determining the ways in which students will provide responses? For guiding faculty in evaluating responses?

If a postsecondary institution wishes to compare the achievement levels of its students with those of students at other institutions or with those of adult groups, how can the necessary data be obtained?

Given that student motivation and faculty acceptance are vital to the success of any educational assessment, how can a postsecondary institution design an assessment program with an immediately recognizable potential for providing important and relevant information to both students and faculty?

How can all of this be accomplished in an economical manner?

ACT organized COMP in an effort to help postsecondary institutions resolve these and other difficulties.

### Results of COMP

The COMP pretest was administered to the entering Freshmen of the Interdisciplinary Studies Program in 1981 and the post test was administered to the same students in 1983. The test is a four and one half hour timed vehicle and is very comprehensive in the scope of the subject matter. Our major interest in this test was to measure the improvement in the competencies which are stressed in the I.D.S. program. We were interested in the progress of the individual student and the class in general. We hoped that this would give us a measure of student accomplishments within the two year span of this program. We were also interested in the ranking of these students on a national norm.

There were subject areas in the COMP Test that are not stressed in this program however, with the exception of the category of "Functioning Within Social Institutions", these students showed progress in all areas. Especially pleasing to us was the progress and percentile ranking in the areas of writing and speaking. Good performance in these areas require maturity in the competencies which are stressed in the I.D.S. program. In these areas, our students ranked significantly higher than most seniors exiting from a four year institution. What follows is the cover letter to us from the director of the COMP Program at American college testing center and the statistical results that we received from him.





September 1, 1983

Dr. Louis Schlegel 1800 South Kirkman Road Orlando, FL 32811

Dear Lou:

Enclosed are your results. One of your students, Jill Henriksen, apparently married and became Jill Heaston. For purposes of this study, her name was coded Heaston on the pretest.

Another two students, P.J. Ahlbrandt and Laura Benedetti, did not tape a response to Activity 13 and thus had five (5) lines of missing data. In order to include them, estimated scores based on their average responses to the other two taped activities were inserted. The resulting scores may thus be <u>underestimates</u> of their proficiency. Ahlbrandt, for example, evidenced a slight loss on the post-test, but if she had performed well on the missing activity, she might have scored 6 - 10 points higher.

I'll be interested in your reactions and interpretations of these results. The low scores and their implications in Functioning within Social Institutions are especially intriguing. Especially interesting is what your program of instruction is in Speaking to achieve such sizeable gains.

Cordially,

Yoe M. Steele

College Outcome Measures Program

JMS/par Enclosure SAMPLE MEANS FOR SPEAKING (EQUATED TO FORM 111)
PLOTTED ON A PERCENTILE TABLE FOR 1258 SENIORS AT 15 INSTITUTIONS

KEY: Pretest means for 35 entering freshmen
Posttest means for 35 second semester sophomores

1% 19 or below

18% over age 30

55% 20-22

rcentiles	TOTAL SPEAKING	AUDIENCE	DISCOURSE	DELIVERY	PERCENTIL
100	<del>- 36 - </del>	- 12	, 12	12	100
95	<del> </del> 3 3	+11	11	11	95
90-	30	110	10	1 0	90
85	29			ψ.	85
80	27	111	' /		80
75	<u>-</u>				-75
70-	Ψ° +24	·	- a	1	
65		8	<u> </u>	1.	70
60	12 3		1		65
55	22	<u> </u>			-60
50-		7		<sup>7</sup> 7	-55
45	, d <sub>21</sub>				50
40	<b>Q</b> <sub>2 0</sub>	Ť.		1	45
35	. ]	6			40 .
<u> </u> •	19	†	†		35
30	T1 6	†	+	+	30
25	1.5				
20-	1 4	+	<b>†</b>	5	20
15	12	†	, <b>+</b>	+4	15
10	119	+3	. +3	13	10
5——	7 5	-12 11	2	72	5
0	lo	10	10	0	
Mean S.D.	21.02 7.68	7.16 2.77	6.99 2.63	7.22 2.61	
S.D.	7.68 ON OF THE 1258 S ces nces	2.77 SENIORS IN THE ACT Composite	2.63 TOTAL SPEAKIN or equivalent es available f Mean - 19.7. 19% ACT 22-24	2.61 G REFERENCE GROUP for 47% Men or 53% Wome Range: Ethnic G 9% Blac	roup k

13% ACT 13-15 16% ACT 16-18

14% ACT 19-21

7% ACT 28-30

2% above 30

### INSTITUTIONS INCLUDED IN THE 1982 SENIOR REFERENCE GROUP FOR SPEAKING

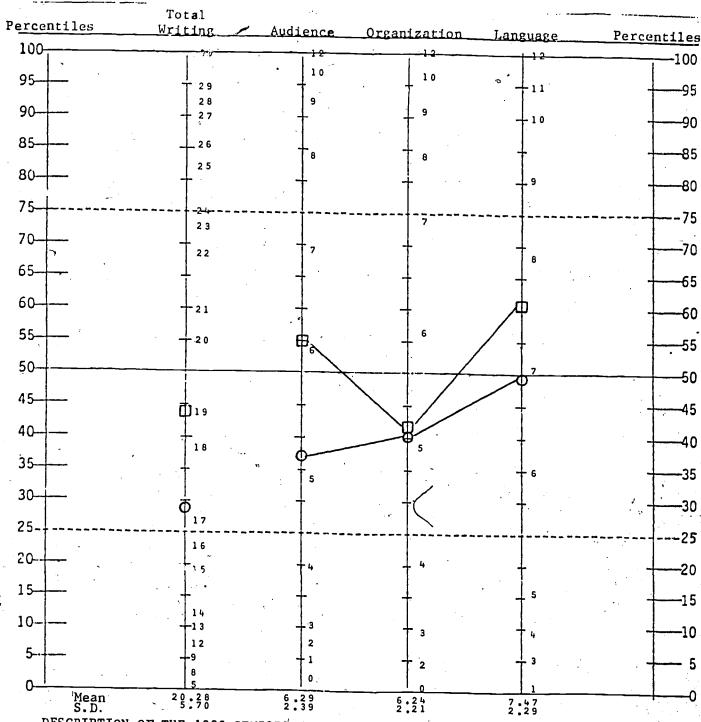
Aurora College
Bemidji State University
Iowa Wesleyan College
Lincoln University
Loyola University of New Orleans
Our Lady of the Lake University
Seattle University
Talladega College
Tennessee Technological University
University of Iowa
University of Northern Colorado
University of Oklahoma
University of Southern Mississippi
University of Tennessee-Martin
Upsala College



# SAMPLE MEANS FOR WRITING (EQUATED TO FORM 111) PLOTTED ON A PERCENTILE TABLE FOR 1335 SENIORS AT 16 INSTITUTIONS

KEY: O Pretest means for 35 entering freshmen

D Posttest means for 35 second semester sophomores



DESCRIPTION OF THE 1335 SENIORS IN THE TOTAL WRITING REFERENCE GROUP

	,	OLOU.
Area of Interest 57% Social Sciences	ACT Composite or equivalent for	47% Men
23% Natural Sciences	SAT Total scores available for	53% Women
19% Arts/Humanities	819 students. Mean = 19.9. Range:	Ethnic Group
	4% below 10 20% ACT 22-24	8% Black
Age Range	7% ACT 10-12 16% ACT 25-27	10% Hispanic
1% 19 or below	13% ACT 13-15 7% ACT 28-30	81% White
58% 20-22	16% ACT 16-18 2% above 30	
24% 23~30	15% ACT 19-21	1% Other

19

17% over age 30

### INSTITUTIONS INCLUDED IN THE 1982 SENIOR REFERENCE GROUP FOR WRITING

Aurora College Bemidji State University Iowa Wesleyan College Lincoln University Loyola University of New Orleans Ohio University Our Lady of the Lake University --Seattle University Talladega College Tennessee Technological University University of Iowa University of Northern Colorado University of Oklahoma University of Southern Mississippi University of Tennessee-Martin Upsala College

> © CLEARINGHOUSE FOR JUNIOR COLLEGES UNIVERSITY OF CALIFORNIA

> > AUG 1 0 1984

8118 Math-Sciences Building Los Angeles, California 90024