

DOCUMENT RESUME

ED 205 925

CS 006 225

AUTHOR Bean, Thomas W.
 TITLE Improving Teaching and Learning from Texts in History and Philosophy through Systematic Staff and Student Development. Final Report.
 INSTITUTION California State Univ., Fullerton.
 SPONS AGENCY California State Univ. and Colleges, Los Angeles. Office of the Chancellor.
 PUB DATE Aug 81
 NOTE 61p.
 EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS Advance Organizers; *Content Area Reading; *Critical Reading; Higher Education; *History Instruction; *Interdisciplinary Approach; Minicourses; *Philosophy; Program Descriptions; *Program Evaluation; Study Skills; Supplementary Reading Materials; Teaching Methods

ABSTRACT

A year-long interdisciplinary project sought to develop professors' available repertoire of strategies for guiding students' independent learning from texts and developing students' ability to learn from texts with adjunct guide materials in a minicourse setting. Adjunct materials included such instructor devised aids as study questions, graphic organizers of text concepts, discussion statements, and vocabulary guides. The guides emphasized critical reading of text concepts by including questions or statements that not only fostered students' understanding of explicit information in the text, but extended this understanding through interpretive and evaluative items. Faculty and students in the two academic disciplines of history and philosophy were selected for participation in the project. An evaluation of the project indicated that while both the philosophy and the history portions of the project contributed to students' critical reading, the history-reading minicourse combination was the most successful of the two. (The project directory and fiscal report, sample adjunct guide materials, and a sample materials evaluation form are appended.)
 (HOD)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

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

* 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 docu-
ment do not necessarily represent official NIE
position or policy.

ED205925

IMPROVING TEACHING AND LEARNING FROM TEXTS
IN HISTORY AND PHILOSOPHY THROUGH SYSTEMATIC
STAFF AND STUDENT DEVELOPMENT

(Final Report)

Dr. Thomas W. Bean,
Project Director,
Reading Department
California State University
Fullerton, CA 92634

August, 1981

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
Thomas W. Bean

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC) "

CS006225

TABLE OF CONTENTS

	PAGE
PROJECT BACKGROUND AND PHILOSOPHY	1
PROJECT PURPOSE AND DESIGN	3
THE PLANNING PHASE	4
Text Analysis	5
Analysis of the History Text	6
Analysis of the Philosophy Text	7
Development of Adjunct Guides	9
History Guides	10
Philosophy Guides	11
Development of Mini-Courses	12
THE IMPLEMENTATION PHASE	12
HISTORY MINI-COURSE RESULTS	15
Structure of the History Mini-Courses	16
Guide Material Evaluations for History Mini-Course Section I	17
Guide Material Evaluations for History Mini-Course Section II	18
External Evaluation of the History Mini-Course	19
PHILOSOPHY 100 RESULTS	22
Guide Material Evaluations	23
CONCLUSIONS AND RECOMMENDATIONS	27
ACKNOWLEDGMENTS	30
REFERENCES	32
APPENDIX A	36
Project Directory	37
Project Fiscal Report	38
APPENDIX B	39
Course Flyer for History Mini-Course	40
Sample Adjunct Guide Materials	41
APPENDIX C	
Sample Guide Materials Evaluation Form	52
Discussion Map Form	53

This report summarizes the results of a year long interdisciplinary project designed to improve university students' critical reading of introductory texts. The report is organized into the following subsections: 1) Project Background and Philosophy; 2) Project Purpose and Design; 3) The Planning Phase; 4) The Implementation Phase; 5) History Mini-Course Results; 6) Philosophy 100 Results; and 7) Conclusions and Recommendations.

Project Background and Philosophy

University faculty believe that students ought to develop the ability to acquire information from textbooks independently and interpret content material critically (Hancock and Moss, 1979a). Yet efforts to improve university students' critical reading of core texts are not widespread (Hancock and Moss, 1979b). Moreover, students' own strategies for studying texts are less likely to induce critical reading than instructor-devised questions. In a recent review comparing student-generated study strategies with instructor-devised adjunct aids (e.g. study guides), Anderson (1980) concluded:

When students study, having only implicit criteria, they often generate their own study aids such as note taking, underlining, and outlining. Research on these activities typically shows that they are not very effective when compared to a read-reread strategy. On the other hand, when students have access to adjunct study aids that often make the criteria explicit, research shows their use to be facilitative. (p. 483)

The contribution of adjunct aids is further enhanced when students engage in discussion and justification of their answers. While such a collaborative approach to text comprehension is attractive, at least three factors limit the use of instructor-devised adjunct aids at the university level. First, faculty who are well versed in their own academic disciplines may not be equally well informed about factors influencing students' critical comprehension of texts. Second, faculty may have little time to devote to a careful analysis of text concepts and the related development of adjunct aids. Finally, the sheer volume of information to be imparted in large, survey courses employing a lecture mode may limit the amount of time available for small group discussion of adjunct guides were they available.

The present project was designed to overcome the aforementioned problems associated with the use of adjunct aids in a university setting. Our project sought to provide professors with the time and information necessary for the development and use of adjunct guides in History and Philosophy. The procedures described in this report should be equally applicable to other academic disciplines.

A secondary area of interest in the project concerned students' perceptions of adjunct guide material. While a number of reading authorities recommend the use of adjunct guides, and some applied research exists to support their use (e.g. Herber and Riley, 1979), only one study (Laffey and Steele, 1979) explored students' perceptions of adjunct guides. Using a five item yes-no questionnaire, Laffey and Steele found that study guide questions emphasizing critical reading of texts received very positive student evaluations across a number of

different subject areas. In our project, we collected similar ratings of various guides on a periodic basis. These ratings provide a good evaluation of which guides were most helpful to students. Indeed, we were able to modify our guide materials using these student evaluations and our own observations of small group study sessions.

In addition to our own internal evaluation of the project, an independent evaluation of the planning and implementation phases was conducted by Dr. Michael Mend, Professor of Sociology at CSUF. Interviews and Likert scale questionnaires were used to collect impressions about various components of the project from faculty and students. Along with project participants, control group students in History, and faculty from Philosophy and History not currently involved were contacted concerning their perceptions of the project. A detailed report summarizing the results of this evaluation is available from the Chancellor's Office (Mend, 1981). Selected data from this report are included in the present document with the consent of the author and the Chancellor's Office.

Project Purpose and Design

The Chancellor's Office of the California State University and Colleges (CSUC) agreed to fund a year long pilot project in the amount of \$21,294 for the 1980-81 academic year (see Appendix A for project directory and fiscal report). Supported by the CSUC Fund for Innovation and Improvement in Education, our project sought to:

1. Develop professors' available repertoire of strategies for guiding students' independent learning from texts.

2. Develop students' facility in learning from texts with adjunct guide materials in a mini-course setting.

Adjunct guide materials include such instructor-devised aids as study questions, graphic organizers of text concepts, discussion statements, and vocabulary guides (Herber, 1978; Readence, Bean and Baldwin, 1981). Students complete these text aids individually and verify or refine their responses in small group study sessions. Adjunct guides emphasize critical reading of text concepts by including questions or statements that not only foster students' understanding of explicit information in the text, but extend this understanding through interpretive and evaluative items. Indeed, such guides increase the likelihood that students will read texts in a purposeful, questioning fashion.

The Planning Phase

Faculty and students in the two academic disciplines of History and Philosophy were selected for participation in the project. Both areas have required entry level courses that demand intensive critical reading. During the Fall, 1980 semester, one faculty member from History and one from Philosophy met in a weekly three hour seminar with the project director from the Reading Department, an additional Reading faculty member, and a graduate assistant assigned to the project. Grant funds provided the project director, History, and Philosophy faculty members with three hours of released time (i.e. one course) from their regular 12 hour load to participate in the planning seminar. During this planning phase, the project members engaged in three major tasks:

text analysis, development of adjunct guide material, and development of mini-courses. Approximately 25 percent of the planning seminar was devoted to text analysis, 50 percent to the development of adjunct guides, and 25 percent to the development of the mini-courses.

Text Analysis

Initial seminar sessions were devoted to a fairly intensive reading and discussion of research in textlinguistics highlighting features of expository text that encourage or inhibit critical comprehension (e.g. Meyer, 1979). In retrospect, we probably spent more time on this area than is really necessary, particularly in reading and discussing primary sources in textlinguistics. In the future, it seems advisable to have the project members simply read and discuss a good secondary source that explicates concepts from textlinguistics in a more readable fashion (e.g. Readence et al., 1981). Doing so will allow more time for a careful analysis of the actual texts to be used in an introductory course and subsequent development of adjunct guides.

Ideas gleaned from our reading and discussion of textlinguistics were then applied to an analysis of the core texts used in History and Philosophy. These texts were:

History 110A (Western Civilization to the 16th Century - 3 Units)

McKay, J.P., Hill, B.D., and Buckler, B.J. A History of Western Society. Boston, Massachusetts: Houghton Mifflin Co., 1979, 1,027 pages.

Philosophy 100 (Introduction to Philosophy - 3 Units)

Plato. The Last Days of Socrates. New York, N. Y.: Penguin Books, 1979, 199 pages.

Hick, J.H. Philosophy of Religion. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973, 133 pages.

Analysis of the History Text

A Raygor (1977) readability estimate based on the average number of words in excess of five letters and the average number of sentences in each of three 100 word samples revealed that this text was at the college level. Thus, in terms of decoding ease and vocabulary load, this text seemed appropriate for an introductory History class.

An analysis of the History text structure revealed that information was presented in a predominantly chronological, survey fashion. We felt that the sheer volume of information presented would limit students' ability to read the material selectively for important ideas. Indeed, Meyer's (1979) research indicates that texts conforming to this informational or attribute structure are typically less memorable than texts that present opposing points of view in an argumentative structure.

Long passages in the History text relate an array of details or attributes to specific events. Descriptions of daily life in various ages and societies, of religions and their growth and influence, and the effect of geography on political development abound in this text. The following three examples illustrate this attribute text structure.

The Lyric Age

Hesiod stood on the threshold of one of the most vibrant periods of Greek history, a period of extraordinary expansion geographically, artistically, and politically. In terms of geography, the Greeks spread themselves as far

east as the Black Sea and as far west as Spain. This period was also one of tremendous literary flowering, as poets broke away from the heroic tradition and wrote of their own lives, loves, hopes, and sorrows. The individualism of the poets typifies this age of adventure and exploration, and the term "Lyric Age" strikingly conveys the spirit of these years. Politically, these were the years in which Sparta and Athens- the two poles of the greek experience- rose to prominence. (p. 50)

Daily Life in Periclean Athens

The Athenian house was rather simple. Whether large or small, the typical house consisted of a series of rooms built around a central courtyard. Many houses had bedrooms on an upper floor. Artisans and craftsmen often set aside a room to use as a shop or work area . . . (p. 67)

Pathology

Modern knowledge of the bubonic plague rests on the researches of two bacteriologists, one French and one Japanese, who in 1894 independently identified Pasteurella Pestis, the bacillus that causes the plague . . . The bacillus liked to live in the bloodstream of an animal, or ideally, in the stomach of a flea. The flea resided in the hair of a rodent, sometimes a squirrel but preferably the hardy, nimble, and vagabond black rat. Why the host black rat moved so much, scientists still do not know, but it often traveled by ship. The black rat could feast for months on a cargo of grain or live snugly among bales of cloth . . . (p. 340)

Analysis of the Philosophy Texts

The two philosophy texts differed substantially in their readability. The Raygor readability estimate for the Plato text indicated that it was at the 10th grade level with an average of 24 polysyllabic words per 100 word sample. In contrast, the Hick text was of graduate level difficulty due in large measure to the high number of polysyllabic words in each sentence (average = 39 polysyllabic words per 100 word sample). Being somewhat suspicious of readability estimates which

really only measure surface structure features of text (Kintsch and Vipond, 1977), we concentrated our analysis on text structure differences. Overlooking the importance of the widely divergent readability estimates for the Plato and Hick texts proved to be a mistake as we discovered during the implementation phase of the project.

Philosophy texts usually employ an argumentative structure. Indeed, this structure is implicit in the nature of philosophical inquiry. Such an argumentative structure in expository text has been found to increase active reader involvement with the material and function as a useful mnemonic. If a reader can recall one half of a pro-con argument, the other half is usually retrievable (Meyer, Brandt, and Bluth, 1980). Moreover, argumentative text encourages critical thinking and debate.

The Plato text corresponds to this argumentative structure. In addition, its narrative form makes it very readable. The following excerpt from this text illustrates these features.

The Apology (Socrates addressing the jury)

Socrates is guilty of corrupting the minds of the young, and of believing in deities of his own invention instead of the gods recognized by the State. Such is the charge; let us examine its points one by one.

First it says that I am guilty of corrupting the young. But I say, gentlemen, that Meletus is guilty of treating a serious matter with levity, since he summons people to stand their trial on frivolous grounds, and professes concern and keen anxiety in matters about which he has never had the slightest interest. I will try to prove this to your satisfaction. (p. 54)

Unlike the Plato text, the Hick text presents information in a form that more closely resembles the attribute or informational structure of a History text. Whereas the Plato text introduces a few, classical

issues concerning justice and an honorable life, the Hick text attempts to explain a number of different arguments for or against the existence of God. This volume and complexity of information in the Hick text is best illustrated in the following excerpt.

The Ontological Argument (from section of Grounds for Belief in God)

The ontological argument for the existence of God was first developed by Anselm, one of the Christian Church's most original thinkers and the greatest theologian ever to have been archbishop of Canterbury.

Anselm begins by concentrating the Christian concept of God into the formula: "a being than which nothing greater can be conceived." It is clear that by "greater" Anselm means more perfect, rather than spatially bigger. It is important to notice that the idea of the most perfect conceivable being is different from the idea of the most perfect being that there is. (p. 16)

The aforementioned text structure differences across and within the two disciplines of History and Philosophy proved to be important in the development of adjunct guide materials. Simply put, different text structures call for different guide materials.

Development of Adjunct Guides

During the planning semi ar we engaged in selective reading and discussion of Herber's (1978) text explaining the rationale and development of adjunct guide materials for the various disciplines. Following this, project members split into work teams to focus on the development of adjunct guides to be used during the Spring, 1981 semester in mini-courses attached to the respective History and Philosophy sections. The Project Director and Philosophy professor formed one team and the Reading faculty member, graduate assistant, and History

professor formed another. Periodic whole group meetings served to critique the resulting materials and make needed revisions. The specific guide materials developed for each discipline are explained in detail in Herber (1978) and in Readence et al. (1981).

History Guides

The first step in the development of adjunct guides is an analysis of text structure. Since the History text presented a large volume of information in an attribute structure, we felt that Selective Reading Guides (Cunningham and Shablak, 1975) alerting students to important information in the text would be helpful. Therefore, the History professor highlighted all major concepts in the text for the Reading instructors. The Selective Reading Guides and other adjunct material reflected concepts marked in the text.

The following three types of guide material were developed for History:

Selective Reading Guides

These consist of a series of instructor-devised statements that accompany a reading assignment and provide a model for purposeful, selective reading (Cunningham and Shablak, 1975). An example from chapter 2 of the History text illustrates this form of guide (Appendix B).

Graphic Post-Organizers

This is a visual diagram to be completed by the student after reading such that it depicts hierarchical relationships among concepts (Barron, 1979). The graphic post-organizers in Appendix B illustrate its composition for History and Philosophy.

Vocabulary Concept Guides

This activity builds on students' denotative understanding of technical vocabulary and attempts to develop their sense of relationships among key concepts (Herber, 1978). Examples for History and Philosophy are contained in Appendix B.

Philosophy Guides

Since the text structure of Plato was argumentative, lending itself to discussion based on the reader's own experiences, we developed an Anticipation Guide for the first selection. We also developed Graphic Post-Organizers and Study Guide questions for subsequent selections in Plato. For the Hick text, we relied on Vocabulary Concept Guides and Study Guide questions, although these were gradually phased-out after the third chapter of the Hick text. The following three types of guide materials prevailed in the Philosophy section for the Plato text:

Anticipation Guide

This consists of a series of interpretive and experientially-based statements that students agree or disagree with before and after reading an assignment (Readence et al., 1981). The Anticipation Guide used with the first selection in Plato illustrates this form of guide (Appendix B).

Study Guide Questions

This is a series of questions designed to advance students' comprehension of a selection beyond the explicit level to interpretive and experiential or critical levels of reasoning (Herber, 1978). The Study Guide example in Appendix B

exemplifies this approach with the Plato text.

Graphic Post-Organizers

These were the most frequently used guides with the Plato text. This form of guide is particularly useful with texts that present an argumentative, bipolar structure (Readence et al., 1981).

These guide materials were organized into syllabi to be used in the mini-courses blocked to History and Philosophy.

Development of Mini-Courses

Two 10 week critical reading (Reading 103G) mini-courses were designed to accompany the core 100 level courses in History and Philosophy during the first 10 weeks of the Spring, 1981 semester (see course flyer, Appendix B). This part of the project was intended to provide small group discussion of text concepts using the guide materials (Anderson, 1980; Herber, 1978; Readence et al., 1981). We felt the initial 10 weeks of a 16 week semester would provide enough guidance such that students could eventually apply the strategies of selective reading and critical questioning on their own. Indeed, one of the assumptions surrounding the use of guide material is that students will employ similar strategies in other courses. We plan to continue exploring the degree to which this assumption holds true by interviewing students involved in the 1980-81 project during the coming year.

The Implementation Phase

Figure 1 depicts our original design for the implementation stage of the project outlined in an earlier Interim Report (Bean, 1981).

A number of changes occurred in this original plan during the actual Spring, 1981 implementation phase.

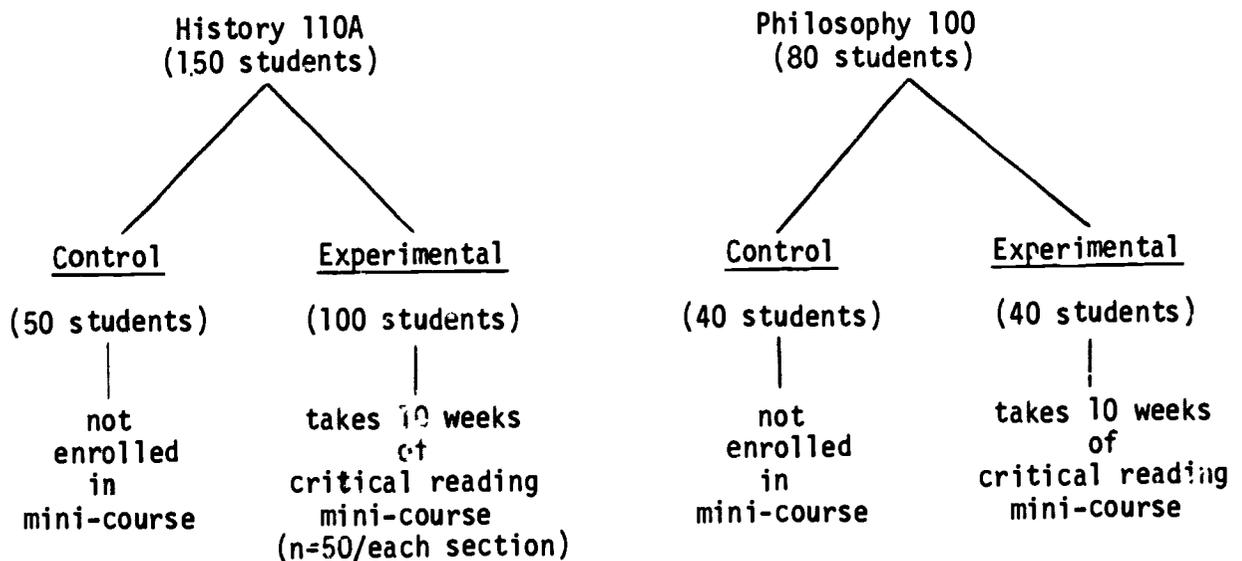


Figure 1. Original Design for Implementation Phase

We overestimated the number of students that would actually be involved and underestimated problems associated with blocking a one hour elective 10 week course to the respective History and Philosophy sections. The actual design for History 110A is presented in Figure 2.

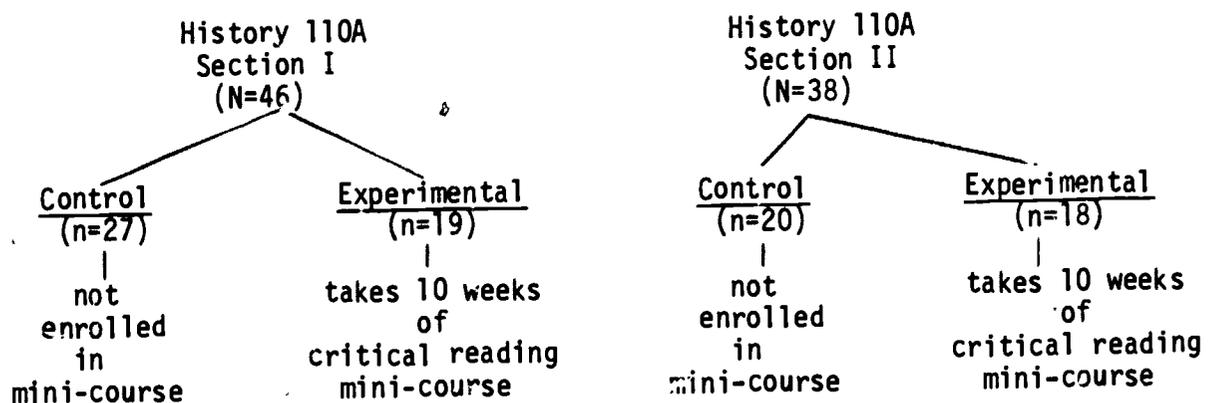


Figure 2. Actual Design for History Implementation Phase

Both sections of History 110A were taught by the History professor involved in the planning phase of the project. Classes were presented in a large group lecture mode. Students in each class electing to enroll in the critical reading mini-course spent one hour and a half after the large lecture session each week working in small groups in the mini-course.

Alerting students to the availability of the elective mini-course was accomplished in the following way. The mini-course was scheduled to begin one week after the lecture section. Its availability was announced with flyers during walk-through registration. However, most students registered for the mini-courses after hearing about them in the large History 110A lecture sections.

Section I of the mini-course was taught by the Reading Department faculty member involved in the planning phase and section II was instructed by the project graduate assistant. Mini-course grading criteria centered on successful completion of the guides and small group participation. Students in each History section not electing to enroll in the mini-courses comprised the control group for external evaluation of the project (Mend, 1981).

The Philosophy portion of the project departed significantly from the original design and the actual History design. Students enrolled in the target section of Philosophy 100 numbered 19 and only six of these students felt they could alter their schedules to take the proposed mini-course. We then decided to use the guide materials we had developed as an integral part of each Philosophy 100 class, devoting about 15 to

20 minutes to small group work with the guides. This modification provided us with a content area reading approach that has been found to be effective at the secondary level (Herber, 1978; Nelson and Herber, 1981). Indeed, it allowed us to compare two divergent approaches to guided reading: the mini-course approach used in History and the integrated approach in Philosophy.

An additional feature of using the guide materials as an integral part of each Philosophy class was that it provided an opportunity to observe, on a day-to-day basis, the degree to which guides facilitated critical discussion. Thus, the Project Director worked with the Philosophy class on a regular basis in a participant-observer role.

Verbatim field-notes (Green and Wallat, 1981) were kept on post-guide discussion sessions. Discussion maps based on these field-notes provide a vivid picture of the degree to which guide materials foster critical thinking. Daily summary notes helped in the editing of guides that looked feasible during the planning stage but sometimes failed when we tried to apply them in class.

History Mini-Course Results

In order to obtain an estimate of students' entry level comprehension of the History text, we administered a cloze test to students enrolled in the mini-courses. A cloze text involves the systematic deletion of every fifth word in a passage resulting in at least 50 deletions. If students can correctly predict at least 40 percent of the missing words in the passage it is thought to be at their instructional level (Readence et al., 1981)

The 19 students in section I of the History mini-course achieved an average score of 34 percent (standard deviation of .14) on the cloze text. This suggests that they would experience difficulty with the History text if adequate guidance were not available. The inclusion of four post-cloze questions further confirmed the cloze results. Students mean score on the post-questions was 20 percent (standard deviation of .33).

While cloze tests are quick and easy to administer and score, they provide little information about students' prior knowledge. They are largely text-based rather than reader-based. Therefore, we are currently exploring the possibility of using some form of schema-generation measure based on students' written "brainstorming" of what they know about Western Civilization to the 16th Century or perhaps a sub-category of this topic. Current research being conducted by graduate students in the CSUF Psychology Department's Cognitive Research Group holds some promise for this approach (Graesser and Clark, 1981). The development of schema maps at the beginning and end of a mini-course would allow for meaningful comparisons of students' pre and post-course knowledge structures.

Structure of the History Mini-Courses

Students met in the mini-course once a week following the large lecture section. The first part of each class was devoted to a discussion of key concepts from the lecture. This was necessary to help students clarify and consolidate new information. The second part of the class focused on small group review and discussion of assigned text guide material with four students comprising each group. In the last part of

each class students developed summary sheets combining text and lecture concepts with predictions of possible objective and essay exam questions (Goldsmith, 1979).

As the mini-course progressed, it became apparent that carefully defining the role of a study group leader was essential to the active discussion of guide material. Thus, each week one student in the role of group leader was responsible for conducting a review of guide material and preparing an additional guide activity. Group leaders did a superb job of leading discussions and generating additional guides including time lines, sample quizzes, vocabulary flash cards, and maps and graphs. In their course evaluations students commented positively on specific student-generated guides such as timelines and summary sheets. The addition of student-devised guides will be an integral part of future History critical reading mini-courses. It appears that when students develop their own guide material after using instructor-devised models they do so quite successfully.

Guide Material Evaluations for History Mini-Course Section I

Students in section I of the mini-course gave all three forms of guide materials positive evaluations based on our own internal evaluation form (see Appendix C). Students completed an evaluation of the guide materials after they had acquired experience using each type of guide. Seventeen of the 19 students evaluated the History guides. Guides received the following average scores out of a possible 100 percent:

Vocabulary Concept Guides (92%)

Graphic Post-Organizers	(90%)
Selective Reading Guides	(82%)

One possible reason for students' slightly lower rating of the Selective Reading Guide may be their growing independence with the History text. As they developed fluency with the text during the 10 week course, they were less in need of the explicit guidance provided by this adjunct. Indeed, this possibility is consistent with the idea of using guide materials during the introductory portion of a course and then slowly removing this aid in order to encourage students' independent use of similar critical reading strategies (Herber, 1978; Readence et al., 1981). In contrast to the Selective Reading Guide which is clearly an instructor-devised adjunct, students can easily generate their own Graphic Post-Organizers of text concepts once they have a model for doing so (Barron, 1979).

Final grades in the History 110A course averaged in the C range for students enrolled in section I of the Reading 103G critical reading mini-course.

Guide Material Evaluations for History Mini-Course Section II

The 18 students in section II of the History mini-course achieved an average cloze score of 47 percent (standard deviation of .14), indicating that the text was at their instructional level. Their post-question average was 61 percent (standard deviation of .32). Although students enrolled in this section achieved higher entry level scores than students in section I, they were still in the instructional range suggesting that they would profit from the guide materials and mini-course.

Students in section II of the mini-course rated the guide materials similarly to students in section I.

Vocabulary Concept Guides (89%)

Graphic Post-Organizers (89%)

Selective Reading Guides (83%)

Students enrolled in this section of the Reading 103G course achieved final grades averaging in the B- range in the History 110A lecture section.

External Evaluation of the History Mini-Courses

Likert scale questionnaires administered during the last week of the mini-courses indicate that students value these adjunct classes (Mend, 1981). Table 1 (Mend, 1981) shows that the mini-courses were particularly helpful for content introduced in the core History classes. The degree to which critical reading skills acquired in the mini-courses might transfer to other classes remains an enigma. Follow-up interviews with students during the coming year may provide us with some answers to this question and help to explain the lower rating given to item b. on the questionnaire.

Table 1

History Students' Evaluation of Reading Component
(percent responding positively to each item)

Items	Percent + Response (n=33)
a. This mini-course helped me learn the material in History 110A	93.9%
b. The mini-course teaches skills that can be used in other courses.	75.8
c. Mini-courses similar to this one should be provided for other courses on our campus.	93.9
d. I would personally recommend to other students that they take this mini-course.	87.9
e. If they were available, I would take similar mini-courses developed for classes in other Departments.	81.8

In addition to students' positive perceptions of the mini-courses, they showed a significantly more favorable attitude ($p < .05$, chi square test) toward the History course than their control group peers (Mend, 1981). Table 2 clearly displays this contrast (Mend, 1981).

Table 2
History Students' Global Evaluation of Course

Items	Program (n=32)	Non- Program (n=29)
a. This course has helped me to be a better educated person.	84.4%	72.4%
b. Because of my experiences in this course, I am planning to take other History courses.	34.4	13.8
c. It is a good policy for this course to be one of our University's General Education requirements.	58.1	48.3
d. This course has increased my ability to understand and interpret the world in which we live.	71.9	35.7

Moreover, Table 3 (Mend, 1981) indicates that students entering the History class with average (i.e. B or less) high school grade points (GPA) perceived History as positively as their above average (i.e. high readiness) peers. Furthermore, they viewed History with a significantly more positive attitude ($p < .05$, chi square test) than their control group peers. This same contrast held for other dimensions of the History course including students' perceptions of the text and their ultimate achievement in History. That is, low readiness students did as well as their high readiness peers when they were enrolled in the adjunct mini-courses (see Mend, 1981 for a comprehensive discussion of all possible contrasts).

Table 3
History Students' Global Evaluation of Course

Items (see Table 2)	High Readiness		Low Readiness	
	Program (n=18)	Non- Program (n=21)	Program (n=13)	Non- Program (n=6)
a.	84.2%	81.0%	84.6%	50.0%
b.	26.3	19.0	46.2	70.0
c.	66.7	57.1	46.2	33.3
d.	84.2	40.0	53.8	33.3

Philosophy 100 Results

Like the History students involved in the project, 19 Philosophy students completed a cloze text on a passage from the first section of the Plato text. Their average cloze score was 56 percent (standard deviation of .13) with a range of 36 to 88 percent. Thus, the Plato text was at their instructional level. Students' average post-question score was 62 percent (standard deviation of .27) with a range of 15 to 100 percent. Cloze and post-question performance were significantly related ($r = .58, p < .01$). Students typically experienced greater difficulty with the interpretive questions and relative ease with the textually explicit items. This confirmed our belief that they would benefit from guide materials designed to foster critical comprehension of the Plato text.

Guide Material Evaluations

Guides were evaluated after each section of the Plato text (see Appendix C). Complete data sets for 12 of the 13 students' evaluations of guides used for approximately 15 class meetings or one-half of the course revealed the following average ratings:

Graphic Post-Organizers	(81%)
Study Guides	(65%)
Anticipation Guides	(46%)

Students' apparent preference for Graphic Post-Organizers may reflect the greater amount of time we spent in class with this form of guide. However, it proved to be the most helpful adjunct we used in the Philosophy class as evidenced by students' open-ended comments on the evaluation form. The following direct quotes are representative.

It enhances discussion.

I am remembering more of the concepts.

It pulled-out the main concepts of the reading.

It deepened my understanding of what was going on in the dialogues.

It is important to note that students read the text and attempted to complete Graphic Post-Organizers on their own. They then met in small groups in the regular Philosophy class to verify or edit these. A recent meta-analysis of research on Graphic Post-Organizers found that partially completed, post-reading organizers contributed more to students' comprehension than organizers that were completely constructed by an

instructor and presented to student before a reading assignment (Moore and Readence, 1980). The process of searching the text to locate concepts for the Graphic Post-Organizer, then writing-in this information, and finally verifying and discussing choices with fellow class members appears to be crucial to the initial use of this guide.

In comparison to the History mini-courses, students in the Philosophy section gave the guide materials a lower overall rating (also see Mend, 1981). This is probably due to the amount of time devoted to guides in the context of the regular Philosophy class. Only about 15 minutes or a maximum of 30 minutes per week was devoted to small group guide discussion. Students were not given points for completing the guides nor was their grade in the class contingent upon guide completion. Despite these factors, students tended to complete the guides and discuss them actively in the small group sessions. However, in retrospect, the greater amount of time afforded by a mini-course blocked to a lecture section clearly makes the use of guide materials more feasible.

Study Guides were used relatively little in the Philosophy class. Students tended to feel that experientially-based questions such as "If you were on the jury at Socrates' trial, how would you have voted?" contributed less to their understanding of the text than the Graphic Post-Organizers. However, students are somewhat unaccustomed to answering questions of this nature which may partially explain their lack of enthusiasm for these guides. This problem could be resolved by including a greater balance of textually-explicit and experiential items on the guides.

We used only one Anticipation Guide in the Philosophy class (Appendix B). It was presented to students before the first selection they read in Plato. Anticipation Guides typically involve the use of value statements related to a text. Unfortunately, this guide was simply too advanced for students at the initial stage of reading Plato. It was apparent in their guide responses that they overlooked Socrates' ironic tone on their first reading of Plato. A good series of textually-explicit and interpretive study guide questions would have been better at this stage of the class.

The second half of the Philosophy course was devoted to the Hick text and issues surrounding belief or disbelief in the existence of God. While this is a provocative topic, the Hick text, written at the graduate level proved to be very difficult for students. Students perceived this far less positively ($p < .05$, chi square test) than Plato (Mend, 1981). Vocabulary Concept Guides (see Appendix B) provided for the first three chapters did little to overcome the abrupt switch from the story-like Plato material to the highly abstract, informational prose of Hick. Indeed, the transition to the Hick text had an effect on the level and frequency of discussion in the class. This is best seen through an analysis of discussions occurring in two contrasting class sessions -- one during the reading of Plato and the other after Hick. Both discussions followed the use of guide materials in small groups.

Verbatim field-notes were transformed into a discussion map format (See Appendix C) concentrating on such variables as the number of statements or questions produced by the instructor or students,

number of different students involved in a discussion, and the level of discussion (i.e. textually-explicit or higher levels).

The first discussion occurred during the 10th class meeting following the use of a Graphic Port-Organizer with Plato's "Apology." In this discussion, students contributed 11 statements or questions and the instructor generated 10 for a very balanced interchange. The discussion map showed that 9 different students participated in the discussion, often responding to each other's statements or questions. The level of discussion displayed good critical thinking with 15 of the statements or questions representing interpretive or critical levels and five operating at more textually-explicit levels.

In contrast to the Plato discussion, a later discussion during the 16th class meeting following the first two chapters of Hick revealed a less vibrant exchange. Students had completed Vocabulary Concept Guides on this material. Only eight statements or questions were generated by students with the instructor contributing 19 to keep the flow of discussion going. Just three students participated with one of the three dominating the discussion. However, the level of discussion did involve critical thinking with 19 of the statements or questions representing interpretive or critical reasoning and only eight focusing on textually-explicit information. Nevertheless, even with guide material, the Hick text was simply too difficult for the majority of students and we failed to adequately anticipate this problem. It appears that when multiple texts are going to be used in a course they ought to be within the college readability range, particularly for Freshmen new to a discipline.

Course final grades averaged C+ with a range of C to A. This is within the normal undergraduate range for introductory courses at CSUF.

Conclusions and Recommendations

These are presented first for the planning phase of the project and then for the implementation phase with a focus on plans for a 1981-82 project and dissemination efforts.

The Fall, 1981 planning phase contributed significantly to the overall success of the project. This phase of the project needs to be maintained in the future with one minor modification. That is, less time should be spent on reading and discussion of ideas from text-linguistics. Rather, additional time should be given to the application of strategies from content area reading (Readence et al., 1981) in the development of guide materials and related mini-course curricula.

The planning seminar could play a larger role in faculty development by including a greater number of participants. However, the provision of reassigned time for faculty makes this an expensive proposition. Yet, given the project's demonstrated contribution to students' critical reading, three units of reassigned time for one semester seems a modest price to pay. Still, expanding the project to include more faculty would entail an interdisciplinary commitment of reassigned time by all departments involved.

Finally, the time involved in developing guide materials and a related mini-course is best served when a major area of the required General Education curriculum is the target of this effort. For example,

introductory courses in areas such as History and Economics each serve approximately 1000 students every semester. Moreover, a single standard text is used in History 110A and B making the development and application of guide materials well worth the effort. This is not to say that the process of developing adjunct guides is not worthwhile for other courses. Faculty could attend the planning seminar, develop some guides and use them as an integral part of their regular class. This is precisely what happened in Philosophy where the guides we developed for Plato are now a regular part of that class.

While both the Philosophy and History portions of the project contributed to students' critical reading, the History 110-Reading 103G mini-course combination was the most successful of the two. This is undoubtedly due to major differences in the nature of the two disciplines. History 110A comprises a broad survey of significant events in Western Civilization, leaving little room for process-oriented instruction in critical reading strategies. Including a one hour mini-course provides the necessary additional time to more deeply process text concepts and synthesize these with information presented in the lectures. In contrast, Philosophy sections tend to be fairly small and philosophical inquiry demands discussion and debate. Many of the strategies inherent in guide questions are already an integral part of philosophical discourse. Moreover, the volume of reading material is typically less in Philosophy than History.

A proposal to work with History 110B and Economics 100 during the 1981-82 academic year has been approved for funding by the Chancellor's Office. The model described for History 110A in the present report will

be continued. In addition, History 110A will again have two Reading 103G mini-courses available for interested students. By Spring, 1982, History 110A and Economics 100 will both have critical reading mini-courses available for students.

Dissemination of the project will take a number of forms during 1981-82. At CSUF we will conduct a three hour invitational workshop for faculty from History, Economics, and Philosophy. National dissemination efforts will include the preparation of a journal article describing the project and presentations of papers at conferences. In addition, the Project Director will be presenting two workshops for faculty at California Polytechnic, Pomona and California State University, San Bernardino.

In summary, the model presented in this report seems to be a feasible approach to critical reading that should be adaptable to most university campuses. Our experience was a positive one largely because of the excellent group of faculty and staff committing time to this effort. Their contributions are acknowledged on the following page.

Acknowledgments

We would like to thank Dr. Linda Jones, Associate Dean for New Program Development and Evaluation, CSUC Chancellor's Office for providing the resources and foresight that made this project a reality.

Dr. Giles Brown, Associate Vice President, Academic Programs/ Graduate Studies, CSUF Campus Coordinator for Chancellor's Office Grants deserves special mention for his continued support and interest in our work.

Dr. Michael Mend, CSUF Sociologist did a superb job of designing evaluation instruments and devoting a substantial amount of his professional skill to the collection and analysis of interview and questionnaire data.

We are especially appreciative of the interest and participation of Dr. Charles Frazee, History, and Dr. Frank Verges, Philosophy, both excellent teachers who were willing to commit their professional time and pedagogical experience to the project.

JoAnn Wells, Coordinator of our Undergraduate Reading Program contributed enthusiastically to the development and implementation of the project. Her attention to details, foresight in defusing potential problems, and overall professional commitment are appreciated.

Hallie Yopp, project Graduate Assistant displayed excellent analytical insight during the planning phase of the project and superb teaching skills. Along with JoAnn, Hallie instructed a highly-rated mini-course and devoted long hours to the development of guide materials.

Last, but definitely not least, Sandy Klees, our Student Assistant did a fine job of typing, data processing, and simply "saving the day"

on a number of occasions. She displayed office management skills far beyond her years.

REFERENCES

- Anderson, T. H. Study strategies and adjunct aids. In Rand J. Spiro, Betram C. Bruce, & William F. Brewer (Eds.), Theoretical Issues In Reading Comprehension. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980, 483-502.
- Barron, R. F. Research for the classroom teacher: Recent developments on the structured overview as an advance organizer. In H. L. Herber and J. D. Riley (Eds.), Research In Reading In The Content Areas-The Fourth Report. Syracuse, N. Y.: Syracuse University Reading and Language Arts Center, 1979, 171-173.
- Bean, T. W. Improving Teaching and Learning From Texts in History and Philosophy Through Systematic Staff and Student Development. Interim Report to the Chancellor's Office Fund For Innovation and Improvement of Instruction, California State Universities and Colleges, January 20, 1981.
- Cunningham, D. & Shablak, S. Selective reading guide-o-rama: The content teacher's best friend. *Journal of Reading*, 1975, 18, 380-382.
- Goldsmith, J. S. A reading approach to college History: A pilot plan. The History Teacher, 13, 1, 1979, 49-59.
- Graesser, A. C. & Clark, L. F. How Are Schema Represented? An Empirical Method of Exposing Schema Content and Structure. Paper presented at the American Educational Research Association, Los Angeles, California, April, 1981.

- Green, J. L. & Wallat, C. Ethnography and Language In Educational Settings. Norwood, New Jersey: Ablex Publishing Corporation, 1981.
- Hancock, D. O. & Moss, A. Literacy in the Disciplines: A Conference Handbook. Reading Department, California State University, Fullerton, Fullerton, California: A Project of the Joint Workshop on Reading and Writing Programs Within the Disciplines, 1979 (a).
- Hancock, D. O. & Moss, A. Reading and Writing Programs Within the Disciplines: A Preliminary Directory of Models. Reading Department, California State University, Fullerton, Fullerton, California: A Project of the Joint Workshop on Reading and Writing Programs Within the Disciplines, 1979 (b).
- Herber, H. L. Teaching Reading in Content Areas. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978.
- Herber, H. L. & Riley, J. D. Research In Reading In The Content Areas- The Fourth Report. Syracuse, N. Y.: Syracuse University Reading and Language Arts Center, 1979.
- Kintsch, W. & Vipond, D. Reading Comprehension and Readability in Educational Practice and Psychological Theory. Paper presented at the Conference on Memory, University of Uppsala, June, 1977.
- Laffey, J. L. & Steele, J. L. Tell no teacher. In Harold L. Herber & James D. Riley (Eds.), Research in Reading In The Content Areas- The Fourth Report. Syracuse, N. Y.: Syracuse University Reading and Language Arts Center, 1979, 177-185.

- Mend, M. R. Evaluation of Program Titled: Improving Teaching and Learning From Texts in History and Philosophy Through Systematic Staff and Student Development. Long Beach, California: Chancellor's Office of the California State Universities and Colleges, August, 1981.
- Meyer, B. J. Organizational patterns in prose and their use in reading. In Michael L. Kamil & Alden J. Moe (Eds.), Reading Research: Studies and Application. Twenty-Eighth Yearbook of the National Reading Conference, 1979, 109-117.
- Meyer, B. J., Brandt, D. M. & Bluth, G. J. Use of top-level structure in text: key for reading comprehension of ninth grade students. Reading Research Quarterly, No. 1, 1980, 72-103.
- Moore, D. W. & Readence, J. E. A meta-analysis of the effect of graphic organizers on learning from text. In Michael L. Kamil & Alden J. Moe (Eds.), Perspectives in Reading Research and Instruction. Washington, D. C.: Twenty-Ninth Yearbook of the National Reading Conference, 1980, 215-217.
- Nelson, J. & Herber, H. Network News: Secondary School Demonstration Centers - Teaching Reading in Content Areas. Binghamton, N. Y.: State University of New York at Binghamton, Division of Professional Education, Vol. 1, No. 1, March, 1981.
- Raygor, A. L. The Raygor Readability Estimate: A quick and easy way to determine difficulty. In P. D. Pearson (Ed.), Reading: Theory, Research, and Practice. Twenty-sixth Yearbook of the National Reading Conference, 1977, 259-263.

Readence, J. E., Bean, T. W., & Baldwin, R. S. Reading In The
Content Areas: An Integrated Approach. Dubuque, Iowa: Kendall/
Hunt, 1981.

APPENDIX A

Project Directory

Project Fiscal Report

PROJECT DIRECTORY

READING FACULTY

Dr. Thomas W. Bean,
Project Director,
Reading Department, EC 526
California State University
Fullerton, CA 92634
Ph. 714/773-3356;3147

JoAnn Wells, Coordinator,
Undergraduate Reading
Reading Department/CSUF, EC 532
Ph. 773-3357

Hallie Yopp,
Graduate Assistant
Ph. 773-3356

Sandy Klees,
Student Assistant

PHILOSOPHY FACULTY

Dr. Frank Verges,
Philosophy Dept./CSUF, EC 456
Ph. 773-3869;3612

HISTORY FACULTY

Dr. Charles Frazee,
History Dept./CSUF, H820G
Ph. 773-3474;3104

FINAL FISCAL REPORT

	<u>Original Allocation</u>	<u>Actual Expenditures*</u>
1. Personal Services		
a) Faculty	<u>13,649</u>	<u>13,385</u>
b) Other Professional	<u>-</u>	<u>-</u>
c) Clerical	<u>1,245</u>	<u>1,080</u>
d) Student	<u>4,900</u>	<u>4,900</u>
e) Benefits	<u>included in a.</u>	<u>included in a.</u>
2. Operating Expenses		
a) Supplies & Communication	<u>300</u>	<u>378.61</u>
b) Film Tape	<u>400</u>	<u>120.58</u>
c) Printing and Duplicating	<u>800</u>	<u>300.00</u>
d) In-State Travel	<u>-</u>	<u>-</u>
e) Consultant & Contract Fees	<u>-</u>	<u>-</u>
f) Other	<u>-</u>	<u>-</u>
3. Equipment	<u>-</u>	<u>-</u>
Grand Total	<u><u>21,294</u></u>	<u><u>20,164.19</u></u>

*Please explain briefly any significant discrepancies.

4/81
New Program Development
and Evaluation

APPENDIX B

Course Flyer For History Mini-Courses
Sample Adjunct Guide Materials

WOULD YOU LIKE TO COMPREHEND YOUR TEXT MORE SUCCESSFULLY IN
INTRODUCTORY HISTORY AND PHILOSOPHY?

This Spring semester (1981), three (3) special sections of READ 103G Critical Reading (1 unit of credit for 1 hour/week for 10 weeks) will accompany designated sections of History 110A (instructor: Dr. Charles Frazee) and Philosophy 100 (instructor: Dr. Frank Verges).

THE CRITICAL READING CLASSES ARE DESIGNED TO ENHANCE AND
REINFORCE CONCEPTS PRESENTED IN INTRODUCTORY HISTORY AND
PHILOSOPHY

Note: If you enroll in either the HISTORY 110A class or the
PHILOSOPHY 100 class, you will need to register in the
corresponding READ 103G class (see the schedule below):

HISTORY 110A
Western Civilization to 16C
MW 1300-1415, Dr. Charles Frazee
Code Number: 29163

----- READ 103G
Critical Reading in History 110A
M 1430-1600, JoAnn Wells
Code Number: 42173R

HISTORY 110A
Western Civilization to 16C
MW 1430-1545, Dr. Charles Frazee
Code Number: 2920z

----- READ 103G
Critical Reading in History 110A
M 1600-1730, Hallie Yopp
Code Number: 42185R

PHILOSOPHY 100
Introduction to Philosophy
TTH 0900-1045, Dr. Frank Verges
Code Number: 36788

----- READ 103G
Critical Reading in Philosophy 100
T 1100-1230, Dr. Tom Bean
Code Number: 42161R

Page 46

After you have finished the entire chapter return to this chart for a good review of the significant events in Greek history.

Pages 47-50

These pages may be read quickly to get a feeling for the Heroic Age.

Pages 50-54

Skim this selection on the Lyric Age. You may be interested in the Greek attitude toward homosexuality (page 53).

Pages 54-58

Read these pages carefully. Note the contrast between Athens and Sparta in both values and lifestyle. Trace the development of Athenian democracy.

Pages 58-62

This selection is important in that it discusses the historical causes for the flowering of Greek culture and thought and, likewise, for the ultimate destruction of Hellenic Greece.

Pages 62-67

Read the selection on Athenian art quickly for an initial exposure to art in Greece.

Pages 67-70

You may skim these pages to get a general feeling for daily life in Athens.

Pages 70-72

Read these pages more carefully. Note here the dominant philosophies and the beginning of scientific thought. Give special attention to Socrates, Plato, and Aristotle.

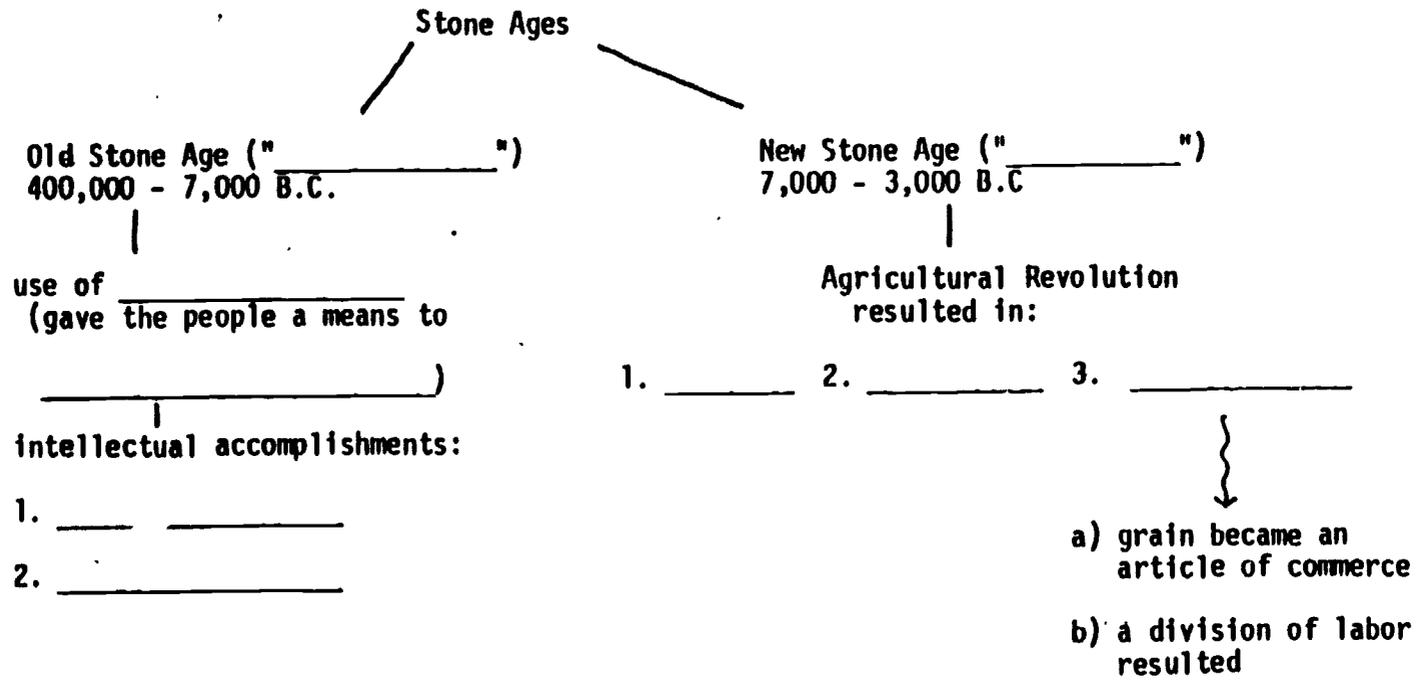
Pages 73-74

This final selection is important in that it discusses the end of Hellenic Greece. Go back to map on page 41 and locate Macedonia. Why was Philip able to conquer Greece?

GRAPHIC ORGANIZER

Directions: Read the selection in your text. In a discussion group provide the missing information that is critical to your understand of the text.

44



46

47

VOCABULARY
Chapter 2 The Legacy of Hellenic Greece

1. IDENTIFICATION

1. Below are important terms from this chapter. Locate the term and read it again in context. Then write a short definition for that term.

Hellas (41,1,1)	_____
Polis (42,2,2)	_____
Mycenaean (45,2,1)	_____
<u>Iliad and Odyssey</u> (47,1,1)	_____
"Heroic Age" (47,1,4)	_____
"Theogony" (48,1,1)	_____
bisexualism (53,1,4)	_____
First Messenian War (54,1,2)	_____
Sparta (54,1,2,etc)	_____
Pericles (5,2,2)	_____
Peloponnesian War (60,1,1)	_____
Parthenon (64,1,1)	_____
Acropolis (65,1,2)	_____
Aeschylus (65,2,4)	_____
Euripides (66,2,1)	_____
Thales (70,2,1)	_____
Hippocrates (71,1,4)	_____
Democritus (71,1,3)	_____
Socrates (71,2,2)	_____
Plato (72,1,1)	_____
Aristotle (72,2,1)	_____
Philip II (94,1,1)	_____

2. RELATIONSHIPS/ANALYSIS

- a. Put the ages in the proper chronological order and include dates.

Lyric Age	_____	_____
Bronze Age	_____	_____
Dark Age	_____	_____
Classical Age	_____	_____

- b. Match the following writers with their periods.

A. Bronze Age	_____	Plato
B. Dark Age	_____	Homer
C. Lyric Age	_____	Solon
D. Classical Age	_____	Herodotus
	_____	Sappho
	_____	Aristotle
	_____	Aeschylus

- c. Write a short summary of the Iliad and the Odyssey - epic poems created by Homer to describe a time when gods still walked this earth.
- d. What are the similarities and differences among the ages - Bronze Age, Dark Age, Lyric Age, and Classical Age?
- e. What are the distinguishing characteristics of Athens and Sparta?

CONCEPT GUIDE III.

Chapter 2

Directions: After reading chapter 2 and completing Guides I. and II., use the following guide to match a critique of an argument for belief in God with the appropriate argument being analyzed. Use the text to verify your answers.

CRITIQUEARGUMENT

- | | |
|--|-----------------------------|
| 1. Events may be infinite rather than connected to a single, causal starting point. | ___ A. Ontological |
| 2. Any universe will appear to its residents as well-designed. | ___ B. Religious Experience |
| 3. Unless the most perfect conceivable island/being exists in reality, it cannot be the most perfect conceivable island/being (Gaunilon). | ___ C. Cosmological |
| 4. People who do not experience special events are less inclined to believe in God, thereby limiting the generality of this argument. | ___ D. Teleological |
| 5. The universe is simply an unintelligible accident. | ___ E. Moral |
| 6. The concept of "existence" fails to support the existence of God beyond a mere label. There is still no direct, tangible evidence (Hume). | ___ F. First Cause |
| 7. Ethical beliefs may not be adhered to in the same fashion in all cultures. | ___ G. Ontological |

Extension Activity

Support an argument for belief in God OR a critique of an argument by listing and discussing examples from the text and your own experiences and beliefs.

ANTICIPATION/REACTION

Directions: Before you begin reading "Euthyphro," consider each of the following statements. Place a check mark by any of the statements with which you agree. Use the column labeled "Anticipation."

<u>Anticipation</u>	<u>Reaction</u>	
___ 1.	___ 1.	A serious crime should be prosecuted and punished whether it is committed by a member of my own family or by someone I don't know.
___ 2.	___ 2.	To say that a certain action is good or just is merely to say that most people would approve of that action.
___ 3.	___ 3.	If a person cannot express his/her thoughts clearly in language then he/she cannot be said to understand them.
___ 4.	___ 4.	Nonconformists are more trouble than they are worth.

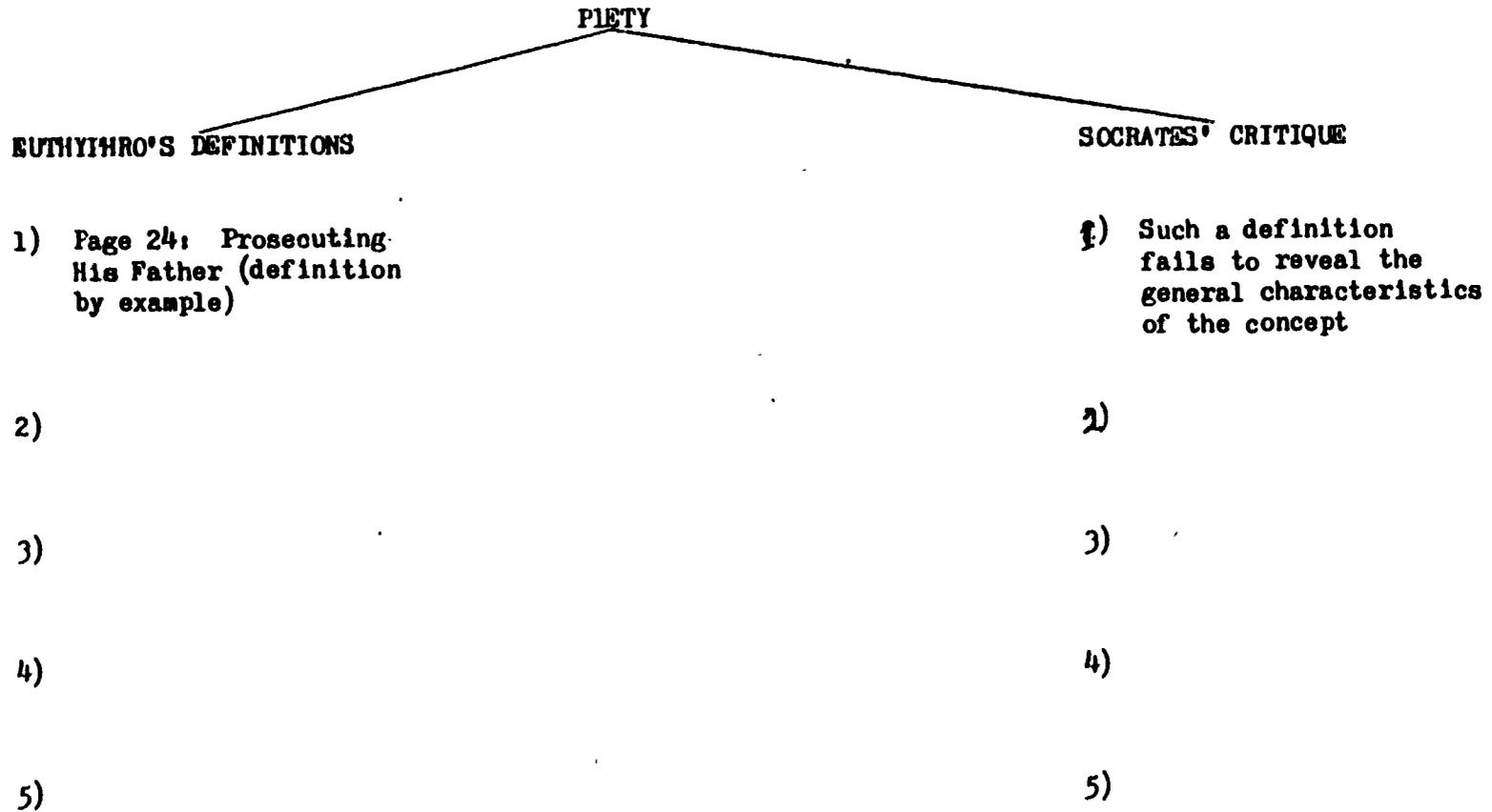
Directions: After reading "Euthyphro," return to each of the statements and reconsider your initial responses. Be prepared to orally defend your point of view in a critical discussion group using the text as a reference point.

Extension Activity: Develop two additional Anticipation/Reaction statements for discussion in your group.

GRAPHIC ORGANIZER

Directions: After reading "Euthyphro," use the following graphic organizer in your discussion group to identify and contrast Euthyphro's versus Socrates' definitions of "piety."

49



53

52

STUDY/REASONING GUIDE

Directions: After reading the "Apology" and working through the Graphic Organizer for this selection, consider the following study questions in your small group.

1. If you were on the jury at Socrates trial, how would you have voted?

For what reasons?

2. If you were Socrates, how would you have defended yourself at the trial?

3. Which of Socrates' responses to the accusations presented at the trial is most persuasive in your opinion?

APPENDIX C

Sample Guide Material; Evaluation Form
Discussion Map Forms

GUIDE MATERIAL EVALUATION

(READING 103G)

PLATO/EUTHYPHRO

Date _____

Name _____

Instructor _____

Directions: Please circle one number after each statement.

5 = Yes 3 = Somewhat 1 = No

A. THE ANTICIPATION/REACTION GUIDE

- | | | | |
|--|---|---|---|
| 1. Assisted my understanding of the Euthyphro | 5 | 3 | 1 |
| 2. Generated stimulating discussion in my small group | 5 | 3 | 1 |
| 3. Helped me relate to the Euthyphro in a personal way | 5 | 3 | 1 |

B. THE GRAPHIC ORGANIZER

- | | | | |
|---|---|---|---|
| 4. Assisted my understanding of concepts in the Euthyphro | 5 | 3 | 1 |
| 5. Helped me retain concepts in the Euthyphro | 5 | 3 | 1 |

C. Which activity did you like best, the ANTICIPATION/REACTION GUIDE or the GRAPHIC ORGANIZER (circle one)? Why?

D. List any suggestions you have to improve the above activities:

DISCUSSION MAP

Background

This classification form was devised to assist teachers in the analysis of classroom interaction, particularly lesson sequences encompassing a "field-test" of a new strategy (e.g. guide material). It requires field notes or an audio tape and transcription of classroom discussion based on a participant observer's record.

The purpose of the discussion map is to assist in the identification of teaching and learning patterns that may be attributable to some aspect of the classroom environment (e.g. absence or presence of adjunct text guides; use of small groups etc.). The discussion map is not a substitute for the original participant observer's field-notes. It systematically ignores subtle features of classroom interaction (e.g. paralinguistic cues) in order to focus on a few salient aspects of discussion. As such, it is merely an analytical tool, twice removed from the fleeting context of classroom events. Therefore, caution and common sense should be exercised in drawing conclusions or generating hypotheses from the discussion map. One should entertain and explore alternative hypotheses through follow-up interviews with the participants and additional field-testing.

Description of Categories and Directions for Coding

Meeting: Indicates that this is the first, second, third...sixteenth etc. class meeting out of X number of total meetings (e.g. 16/20).

Date: Day-Month-Year (e.g. 2-12-81)

Text: Title, Author, Publisher, Copyright date etc.

Context Description: A general overview of what the instructor and students are doing (e.g. Instructor lecture at board on photosynthesis followed by lab work in teams and large group discussion).

Guide: Indicate whether or not students have been provided with some form of study guide or concept organizer and whether or not the discussion being coded is pre or post student completion of the guide material. If no guide was used, simply indicate "none."

Source: Discussion may be generated by instructors or students (use a check mark (✓) or initials depending upon specificity desired).

Form: Discussion may involve either questions or statements (indicate with a check mark (✓) in the appropriate column).

Level: Questions or statements may be classified as:

Literal: Repetition of text or lecture concept

Interpretive: Making inferences and expanding upon the literal information presented in the text or lecture.

Applied: Making a connection or transfer of concepts presented in the text or lecture to other, similar or divergent contexts.

Evaluative: Making a judgment about text or lecture concepts.

Function: Discussion may be facilitated or inhibited by the functional nature of participants' statements (or responses) and questions. These classifications are designed to provide a further description of statement and question quality.

Focusing: Initiate discussion or refocus on the issue.

e.g.: "What did you like best about the story?"

or

"What was the question we started to answer?"

Controlling: Direct or dominate the discussion.

"Michelle, would you review the plot?"

Ignoring or Rejecting: Maintain current trend in discussion. Disregard a student's interest.

"Would you mind if we don't go into that now?"

Extending: Obtain more information at a particular level of discussion.

"What other information do we have about the hero?"

Clarifying: Obtain a more adequate explanation. Draw out a student.

"Would you explain what you mean?"

Raising: Have discussion move from factual to interpretive, applied, or evaluative level.

"We now have enough examples. What do they have in common?"

Sample Field Notes and Discussion Map Coding

The following sets of field notes were collected in a Philosophy 100 class where guide materials were being field tested. First, take some time to go over the field notes and then see how they are coded on the discussion map. What conclusions can you draw from the two sets of field notes and related discussion maps? What alternative hypotheses might explain any differences apparent in the two sessions? What research questions for further testing might you generate from these two discussion maps?

¹ Adapted From: Green, J. L. & Wallat, C. Mapping Instructional Conversations- A Sociolinguistic Ethnography. In Judith Green & Cynthia Wallat (Eds.), Ethnography and Language in Education. Norwood, N. J.: Ablex, 1981, 161-205.

Singer, H. Active Comprehension: From Answering to Asking Questions. The Reading Teacher, May, 1978, 901-903.

