## AIM, MATTER, AND METHOD

## Jean Dietz Moss West Virginia University

Two years ago West Virginia University sponsored a workshop to encourage faculty to develop a new type of self-instructional course, the Personalized System of Instruction. The workshop was attended by some forty faculty members from various disciplines. Techniques developed there were applied in such widely divergent subjects as psychology, chemistry, foreign languages, library science, poetry, and freshman composition. Although I am a historian with several years experience in teaching surveys of western civilization and British history, my interests are interdisciplinary and I have been teaching in the English department for several years. Thus it was in the basic freshman writing course that two colleagues and I worked out what proved to be a successful self-instructional approach. In the process of developing materials for the course, I was struck by the applicability of the method to the subject matter of the survey, and thereupon I decided to try to promote interest among historians in adopting this approach. To support my contention that the method is feasible I wrote to four historians who I had been informed had developed PSI surveys regarding their experiences. These experiments were developed in history departments at Washington International College, Washington, D.C.; Amarillo College, Amarillo, Texas; Carnegie Mellon University, Pittsburgh, Pennsylvania; and Colorado State University, Fort Collins, Colorado. Armed with their responses, my own experience, and the testimony of others at WVU, I suggest that the method here presented deserves wider attention than it commands at present.

The message of this essay is directed to a particular audience: those who teach the historical surveys and still feel that the course serves a worthwhile purpose, that in spite of all the obituary notices to the contrary, it is still alive, though not altogether well. I am convinced that there are many around the country who are still describing the glory that was Rome, the Völkerwanderung, the rise of the nation-state, and pondering the causes of wars and revolution, for scores of apathetic freshmen each year. We, the traditionalists, are aware of the antiphonal cries from our colleagues at the bier of the survey which intone "too much data buried her" and "irrelevance killed her." We are aware, but we are really not comfortable with the substitutes suggested. For example, some historians promote the course that gives the student the thrill of being his own historian. Then there are the fad courses which fight irrelevance: the history of marbles, of black magic, of your Uncle Charlie. Finally, there are "enrichment" techniques, which even we use, including movies, novels, scenarios, and simulation games, while all the time worrying about losing sight of the aims of the course, of letting the course become dominated by them.

Aims are the concern of many commentators on history in the classroom, including two who complain that the feature of the AHA Newsletter entitled "Teaching History Today" contains "numerous reports from those who have found some particular experiment with the curriculum rewarding or successful—experiments having little to do with the proper objects of historical knowledge and much to do with keeping our student-clients satisfied." They continued: "We are tempted to think that the American Historical Association recognizes no particular standards; at least it fails to encourage serious discussion of 'education' and what it means, or should mean, in the scheme of historical work. We wish to raise the question, how can the avowed purpose of the educator be reconciled with the pandering—the groping, often silly efforts at making history attractive to the uninterested—that goes on in the News—letter?"

An earlier version of this paper was delivered at the annual meeting of the American Historical Association, December, 1975.

A careful look at the survey's educational purpose, as these critics suggest we take, reveals credible purposes: the development in students of a body of general information about the what, where, when, how and conjectured whys of selected civilizations and an awareness of the critical nature of the historian's task. Such courses, so goes the rationale, are invaluable preparation for further specialization or are a supplemental background for students in contiguous areas of study. The general aims, then, appear to be worthwhile; however, many who teach surveys are troubled each year by the realization that so few students really attain the objectives of the course.

I would like to suggest that the fault of the survey lies not so much in aims but rather in the matter of the course and in the method of presenting it. First let us consider the <u>matter</u>, the enormous chunks of information the student is expected to assimilate over the course of the semester. The traditional survey demands that the student acquire a knowledge of multidimensional historical patterns (economic, political, social, and religious), historical facts, concepts, and interpretations. The aim is to familiarize the student with as many of these elements as possible, and he is expected to retain most of them. The problem is that we who have taught it know what a monumental job it is to stay on top of the material in such a course. Pity the poor student who hasn't the motivation of loving the subject, or, more crassly, of earning a living by teaching it.

Second, consider the <u>method</u> of presentation. Usually it consists of text, lecture, and discussion, supplemented occasionally by the "enrichment" sessions mentioned above. Difficulties arise here for many reasons. Student motivation must of necessity be high to enable a student to derive knowledge, much less enjoyment, from the course. In covering so much material the professor has little opportunity to entertain and enliven the course. Unfortunately many students, we find, are enrolled in the course because it fulfills some academic requirement. Where the course is a free elective, enrollment drops off.

It is difficult for students to assess what is important, what they should remember. Lectures and texts range over too vast an area. Since the survey is generally an introductory course, younger students who have not developed skills in listening and reading may miss the import of lectures or text. Rarely are course objectives spelled out in terms that will help the student see what is expected of him.

There is no room for individualization in learning. All students are presented with the same content at the same time regardless of their interest, prior knowledge, or ability. The rare student who is really interested and who has done some reading on his own cannot move on to the areas with which he is not familiar. Conversely, the student who has little previous knowledge and possesses fewer abilities and interest cannot say, "Hey, slow down, I didn't understand that."

There is no continuous feedback to each student from the teacher about how he is progressing in the course. If he hesitates to speak in class, he has no chance of testing the teacher's opinion of his views until he takes a test. And there are problems with the tests, especially when evaluation of the student's progress is by means of the usual three or four achievement tests given in a semester. These tests cover a very large amount or material and the student is often unsure of what will be emphasized since objectives probably have not been stated precisely.

The problems engendered by the matter and method of the traditional survey seem to me to be somewhat mitigated by the adoption of a different method such as the Personalized System of Instruction. I say "somewhat" because I do not

see the method as a panacea for all of the difficulties outlined above, though I do think it is a much better alternative than the text-lecture-discussion method. This approach to instruction has been developed recently by the Center for Personalized Instruction at Georgetown University and is based on a system devised by Fred S. Keller, an eminent psychologist. The method differs from many self-instructional courses in that it uses tutors, either peers from the same class or graduate students, and it retains the professor in an active role as a respondent to student questions, an arbitrator for student-tutor disagreements, and an evaluator of student progress.

An examination of some of the characteristics of such a course reveals the manner in which some of the major problems of the survey can be resolved. The matter of the course is not reduced, but it is made more manageable. Units are short to provide frequent feedback, and objectives are written in behavioral terms for each unit so that the material has focus. Thus the textbook can remain a major source for the course, but what the student is asked to remember is clear: for example, "The student should be able to describe the relationship between vassal and lord, stating the responsibilities of each." Some teachers complain that this technique gives the test away. PSI exponents reply: "Good; you are attempting to help the student learn, not trying to catch him up on what he has overlooked." In addition, questions reflecting objectives may ask for applications of concepts in different material, thus requiring the student to understand concepts, not merely memorize them.

The entire content of the course is in writing, as are student responses. Besides course objectives, procedures of study are also outlined in detail. For example, a typical syllabus might include the following requirements for study: "1. Read Willson, pp. 20-43. 2. Study the concepts below. 3. Answer the practice questions following the concepts. If you do not understand the questions, ask a tutor to help you."

The <u>method</u> employed in a PSI course is quite different from the traditional approach: the teacher becomes a facilitator of learning and students learn at their own speed. The teacher is freed from lecturing and can give the student immediate attention should he require it. In addition, because PSI courses use tutors who have successfully mastered the material there can be a constant one-to-one exchange between tutors and students.

In PSI classes students proceed at their own pace. Teacher and tutors administer the quizzes when students are ready for them. Quizzes are scored immediately so that the student can go on or re-study as is necessary. The numerous quizzes are formative in nature as opposed to summative, thus checking the student's progress over a relatively small portion of the whole and furnishing feedback on his progress to him. The summative evaluations, or achievement tests, are given midway and at the end of the course. If a student does not pass all of the questions on a quiz, he is permitted to take another after he has reviewed the material. Three attempts are usually sufficient. The idea is that a student should attain a 95-100% mastery of the course materials.

In addition to the basic course material, the teacher can also offer supplemental "enrichment" sessions such as lectures, films, discussions, or simulation games. These sessions are often used as bonuses, attendance being restricted to those students who have passed a certain number of units.

Overall the PSI approach tends to give the student the motivation he often lacks in the traditional course. When he knows the objectives of a lesson beforehand, and the quiz is based on the objectives, he is usually successful in mastering the materials. The experience of success spurs him on to the next unit. Surprisingly, he may even say he likes the course.

Now, let us consider some tactical questions. How does one go about preparing such a course? My colleagues and I proceeded as follows. First, a decision was made on the amount of material to be covered over the semester. We developed 14 units, as did others working in different disciplines. Then we prepared objectives expressed in behavioral terms for each unit and the unit test questions, which mirrored those objectives. We found short essay questions worked best, though my psychology and chemistry colleagues use multiple choice questions. Preparing these components first helped in focusing the emphasis of the study guide and study questions, which we wrote last for each unit. In the study guide we listed the readings to be completed and any special directions necessary. This was followed by a series of questions meant to lead the student sequentially through the unit material. One advantage of the course which we had not forseen was that since the materials were prepared during the summer, we had much more time than usual during the semester to see students individually and to make any revisions or additions to the course if they were required.

What do you do with students who are not self-starters, who need to be prodded to get their work in on time? We had anticipated this problem and in introducing the course had stressed the responsibility which each person has to take for setting his own deadlines. We suggested a minimum rate of progress through the units and provided each student with a check-off sheet similar to the one we kept ourselves.

What size class can be taught with this method? Class size varies considerably. Our English classes have from 25-30 students, psychology classes from 50-70. When, in preparation for this essay, I queried some history instructors around the country currently using PSI courses in surveys, I found that the number of students ranged from four to 130.

How does such a class operate within the academic framework? It requires no special equipment or additional hours, but it is advisable to have a section of the room or a separate room set aside for giving quizzes. The actual classroom experience is a unique one and initially a little frightening. As one instructor put it, "It's wild." Students come and go during the class period; several discussions between students, tutors, and teachers may be going on at once. Requests to have quizzes administered pop up throughout the room. One of the most noticeable differences in this classroom compared to the traditional one is the attitude of the students. They are enthusiastic and involved in their work, and they are quite proud of the number of units they have passed successfully.

Professors appear to enjoy it too. What is sacrificed in classroom control is balanced by what is gained in greater control of the content. It is a relief to bring into focus clearly in writing what has often been emphasized in lectures but missed by students. Although the ego-satisfying lecture experience may be missed by many of us, teaching becomes, I think, far more effective.

It has been pointed out by critics of PSI that one serious disadvantage of the course is that students are not permitted to be creative in their responses. This is not a necessary circumstance. Although objectives are stated precisely, questions can be framed in such a way as to allow for answers that test various levels of understanding and call for application of concepts and extrapolation. One may reply that objectives, too, should be more flexible to permit the exceptional students the possibility of new syntheses. Indeed, this kind of outcome would be welcome, but the most probable place for new syntheses is in a more advanced course; unhappily most students at the introductory level appear to be happier when objectives are "spelled out" and their task clearly outlined.

One method of judging whether the PSI history course fulfills the educational aims described at the beginning of the paper ("the development of a body of information") would be to compare student scores on a common final exam given to PSI students and those of students in a traditional course. An article in a recent PSI Newsletter reports that in 31 comparisons of final examination scores in various fields of study, 30 out of 31 courses yielded better examination performance. The evaluations of a PSI history survey course at Colorado State University would seem to indicate that similar success can emerge in history too. Obviously PSI as a classroom method for history offers some provocative possibilities worthy of experimentation.

## NOTES

<sup>1</sup> Michael Lodwick and Thomas Fiehrer, "Undoing History; or, Clio Clobbered,"

AHA Newsletter, 13 (May/June, 1974), 11-12.

Described in Fred S. Keller, "Goodbye, Teacher . . .," <u>Journal of Applied Behavior Analysis</u>, I (Spring, 1968), 79-89.

<sup>&</sup>lt;sup>3</sup>J. A. Kulik, <u>PSI Newsletter</u>, III (June, 1975), 1.

See David McComb, "Clio and Keller--PSI in the History Classroom," in this issue of <u>Teaching History</u>: <u>A Journal of Methods</u>.