This working paper offers considerations to be reviewed by the Faculty of the School of Behavioral and Social Sciences as it examines and reviews curriculum and effects changes for social studies elementary school teacher's improvement within the framework of the 1972 Ryan Act. Abolishing single discipline liberal arts majors, the new law emphasizes breadth of training in a wide range of school subjects, and authorizes colleges and universities to license directly only those who have graduated from an 84 unit diversified degree program. In response to this situation, the Academic Senate at CSU/SF approved a new 36-45 unit Liberal Studies major for a B.A. degree which when combined with 40 units of general studies credit will satisfy the Ryan Act's demand for a diversified degree program. The new major emphasizes only unit totals. There are many problems associated with this new major which is open to all students, not only teacher candidates. The licensing act is taking effect at the same time that changes are taking place in elementary social studies. Decisions are discussed regarding two positions -- whether to deliberately design teacher education courses or whether most courses now offered can contribute toward achieving these goals. (Author/SJM)
The School of Behavioral and Social Sciences

and

The Preparation of Elementary School Teachers

A Working Paper

by

Morris Lowenstein
Professor of Social Science

Sept. 15, 1972
Preface

The enactment of the Ryan Act by the California Legislature has radically changed the licensing requirements for teaching in California elementary schools. This Act is supposed to be in effect for students entering College in 1972. Its enactment presents CSU/SF and all other colleges and universities in California with both the demand and the opportunity to review its elementary school teacher training programs and to revise them in the light of not only the new legislative requirements but also recent curriculum trends in the schools themselves and the findings of research into teaching and learning processes.

This report is concerned with the contributions of the School of Behavioral and Social Sciences to the general education and academic training of elementary school teachers. Presumably, other Schools within the university which have similar responsibilities might also examine their roles in teacher education. The Department of Elementary Education which has primary responsibility for the professional training will certainly be revising its program in line with the revised licensing requirements. All of this work must be done. This report is only one part of it. It is a step, a working paper, for consideration by the Faculty of the School of Behavioral and Social Sciences as it proceeds to examine its own curriculum and effect changes for its improvement relevant to the needs of elementary school teachers.

The Ryan Act Requires Changes in Teacher Education

The fundamental change affecting this School accomplished by the Ryan Act is the abolishment of single discipline liberal arts majors as the desired types of academic programs elementary school teachers should complete for the B.A. degree. Under the previous Fisher Act, students desiring elementary credentials might choose any one of the majors offered in this School for the B.A. degree: history, anthropology, psychology, sociology, geography, economics, political science, international relations, or interdisciplinary social science. After completing the minimum general studies requirements, these students were not required to complete any courses in social science disciplines other than the one in which they chose to major. If they chose a major outside this School, candidates for the elementary teaching credential were not required to take any courses in this School at all beyond the general studies and statutory requirements, which were usually completed in a junior college or our own lower division courses.1

1(The exception to this statement were Psychology 411—Educational Psychology, which was a requirement in the professional education sequence, and Geography 430—World Regional Geography, which was on a list of eight courses from around the campus which deal specifically with the content of the elementary school curriculum from which all elementary credential candidates were asked to choose four. These courses were regarded as requirements for a credential as distinguished from requirements for the B.A. degree.)
The justification for this kind of academic training for elementary teachers rested on the assumption that the single discipline major trains the student who completes it to use his mind: to think effectively, to discriminate, analyze, synthesize, and organize. Armed with this kind of training, the elementary teacher was expected to be able to deal effectively with the content of all areas of the elementary school curriculum by using the intellectual skills he had developed in his major to educate himself whenever he was not prepared to teach in a particular area of the curriculum on the basis of previous experience or general educational background.

The authors of the Ryan Act frankly rejected this assumption about the best way to train elementary school teachers. Instead of prescribing that students pursuing elementary teaching licenses should develop depth in a single academic discipline, the new law emphasizes breadth of training in a wide range of school subjects. It demands of students who do wish to pursue a conventional single discipline major for the B.A. degree and then wish to become elementary school teachers that they must pass a general subject matter knowledge examination to be developed and administered by a new state agency, the California State Teacher Licensing Commission. Teacher candidates seeking licenses may be exempted from this examination and receive their license directly from a college or university by successfully completing, among other requirements, a "diversified" or "liberal arts" degree program which has been approved by the Licensing Commission. The Ryan Act specifies that to be approved such a program must consist of at least 84 semester hours equally distributed among the four areas:

1. English, including grammar, literature, composition and speech;
2. Mathematics and the physical or life sciences;
3. Social Sciences, other than education and education methodology;
4. Humanities and the fine arts including foreign languages.

The law allows for a three semester unit variance in any of the four areas required. It also specifies that elementary license candidates may be required to take 12 semester units of professional education courses plus student teaching and that for any college to gain approval for its program by the Commission, it must be possible for a student to complete both the 84 unit academic program and the professional preparation program within the total unit requirements normally required for the four-year B.A. degree.

The New "Liberal Studies" Major at CSU/SF

In effect, the state legislature in passing the Ryan Act required California colleges and universities to offer new types of academic majors for the B.A. degree never offered before if they wish to continue to train elementary school teachers. In response to this pressure, in the Spring of 1972, the Academic Senate of CSU/SF approved a new academic major labeled LIBERAL STUDIES which will allow prospective elementary school teachers to receive a B.A. degree and exempt them from the general subject matter knowledge test that the law requires of all candidates who do not graduate from an approved program. A chart categorizing the various requirements in this new major and "diversified" degree program is reproduced on the following page.

2The language of the Ryan Act changes the label of the certificate of legal qualification to teach from "credential" to "license."
LIBERAL STUDIES DEGREE PROGRAM: THEMATIC CORE IN AREA I

<table>
<thead>
<tr>
<th>Area</th>
<th>General Studies</th>
<th>Statutory Requirement</th>
<th>Thematic Program</th>
<th>Related Courses</th>
<th>Recommended Totals (BA Candidate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I:</td>
<td></td>
<td></td>
<td>Core</td>
<td>Related Courses</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td>15-18</td>
<td>18-24</td>
<td></td>
</tr>
<tr>
<td>(grammar, literature, composition and speech)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Area II:</td>
<td></td>
<td></td>
<td>6-16</td>
<td>6-12</td>
<td>18-24</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td>6-16</td>
<td>6-12</td>
<td>18-24</td>
</tr>
<tr>
<td>or Physical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or Life Sciences</td>
<td></td>
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</tr>
<tr>
<td>Area III:</td>
<td></td>
<td></td>
<td>6-16</td>
<td>6-12</td>
<td>18-24</td>
</tr>
<tr>
<td>Social Sciences (other than education and education methodology)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area IV:</td>
<td></td>
<td></td>
<td>6-16</td>
<td>6-12</td>
<td>18-24</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and Fine Arts, including Foreign Languages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This sample is for a student wishing to emphasize Area I. (39-45)

Similarly, the core could be in Areas II, III, or IV.
Technically, what the Senate has approved is a 39-45 unit academic major for a B.A. degree to be organized around a thematic program. The major is to cut across department and school lines, and the academic units credited to it can be considered as separate from the 40 unit general studies program which has been prescribed by Title V. However, as the way in which the chart presenting the details indicates, those who formulated the proposals for this major were not free to develop a program for interdisciplinary thematic majors alone, but they were constrained in developing their proposal by both the demands of the 40 unit general studies program and the academic categories of the 84 unit diversified major prescribed by the Ryan Act. The major is supposed to be open to prospective teachers and non-teachers alike, but its basic format has been dictated by the law governing the licensing of teachers in California.

Practically as the far right column of the chart shows, for prospective teachers the requirements for the B.A. degree based on a LIBERAL STUDIES major are the same as the requirements of the Ryan Act. Students will be required to earn for their degrees a minimum of 18 and a maximum of 24 units in each of the curriculum areas mentioned in the Act, including the courses taken for general studies credit. The 3-unit statutory requirement in history and government, which does not now count for general studies credit, and from which students may be exempted by examination, will not be counted toward credits in the social science category for the major. The 84-unit major requirements plus 24-27 units of required professional education courses including student teaching leaves only 10-13 units of free elective credit in the framework of 124 units required for the B.A. degree. Of course those students who elect thematic programs who do not choose to work for a teaching license may use the 24-27 units for more electives.

Problems of Implementing the LIBERAL STUDIES Major

As passed by the Senate, the requirements for this new Liberal Studies major and degree program are very vague. Establishment of unit categories and limitations within which to work can only be regarded as a first step on the road to developing actual curricula. Many additional problems will have to be overcome before a sound educational program based on this framework can be implemented. First, if thematic programs are indicated for large numbers of students, appropriate themes need to be defined and individual courses which might have contributions to make to understanding those themes identified and offered with sufficient student spaces available to meet demand. Perhaps some new courses will have to be developed or old ones offered more frequently or in more numerous sections. Beyond considerations of individual courses are problems of advising and articulation, and integration within the curriculum for all students majoring in it regardless of whether they wish to become teachers. Meeting the needs of future classroom teachers poses still another set of problems that must be defined more clearly and resolved.
Problems of Identifying Themes and Individual Courses and Problems of Advising

Problems relating to selecting themes, identifying courses, and insuring they are offered with sufficient spaces so that students may in fact complete intelligently planned interdisciplinary, interdepartmental, and inter-school thematic programs can be anticipated as a category in getting this new degree program under way. However, at this stage, it seems impossible to define them more specifically. No clear statement has yet been formulated and endorsed on this campus which defines the characteristics of an educationally sound thematic program that might be developed within the semester-unit limits of the Liberal Studies major approved by the Senate. Perhaps that ought to be the first order of business.

Because of the pressures of the Ryan Act, CSU/SF is expected to enroll students in thematic programs in the fall of 1972 without this preparatory work brought to fruition, but we must begin anyway. No one knows for sure how many students will enroll in the new program or what themes they will be attracted to study. In most college programs, faculty advisers have some influence over which courses their advisees register to take. This might be expected to happen in the new program also. However, at this point the advisers for the new inter-school major have not been chosen. It has been determined if one adviser who will help a student choose related courses in all four Ryan Act categories listed in the major or whether advising is to be done by committee. Students might be directed to advisers by alphabetical classification, by stated preference for organizing themes, by choosing a faculty member from the School in which he chooses an "area of concentration" or by some other principle.

This is apparently an area in which CSU/SF will have to feel its way hoping that "more light will enter the tunnel" as more experience is gained with the developing program itself. This is not a very satisfactory response to a multitude of problems, but there is apparently little that can be done without more hard information available about what the needs of the program actually are. Someone needs to be assigned specific responsibilities to collect such hard data about the campus-wide experience with the developing program, data that will be useful for more intelligent future planning as it becomes available. Answers need to be developed to a long series of very specific questions such as:

How many students are choosing to enroll in the Liberal Studies major?

How many of these are oriented to an elementary school teacher's license? How many are not oriented to teaching careers?

How many continue in the program to a B.A. degree? How many transfer "out" to another major before graduation?

What themes are they choosing to organize their programs of study around?

Stanely Bailis is preparing a working paper addressed to this major topic for the use of the School of Behavioral and Social Science faculty.
What "areas of concentration" are they choosing? To what degree is this a function of who their advisers are?

Are some themes becoming so popular that standardized "package curricula" could be developed for large numbers of students and courses scheduled primarily on the basis of their needs?

What new thematic or integrative courses have been suggested to be developed to serve the most popular thematic programs?

Which faculty are motivated to participate as teachers and advisers in which thematic programs?

What regular departmental courses which might serve the interests of Liberal Studies students (who don't receive major preference in any department) are being closed out at registration time and these students are unable to register for them?

What kind of advising system is being developed for the inter-school thematic program?

How are advisers chosen and assigned to work with specified groups of students? How are students directed to an adviser?

How are advisers educated for their tasks? How do they learn about courses all over the campus that might pertain to various themes they have responsibilities to program?

What kinds of information and orientation systems for advisers seem to work?

How do departments regard the assignment of advisers to interdepartmental programs? Is this program able to secure its proportion of the best advising talent and energy on the faculty?

How can information about the needs of students and unresolved problems in the program be channeled to the administration and faculty agencies who have control over faculty resources and power to effect changes in how these may be redistributed within the system?

The tasks that lie before the university faculty to develop thematic programs that will make available relevant courses (with appropriate numbers of student spaces) in the various categories of the major that will in fact relate to each other in ways to constitute educationally sound programs are enormous ones in themselves. They are complicated by the fact that in the beginning of the program there is no established corps of interdisciplinary advisers with experience in guiding students to relevant courses offered in the various academic divisions of the university. Both jobs, curriculum development and advising, hit a snag of Herculean proportions when they face the task attempting to develop programs for upper division students that will build on academic work already completed for general studies credit.
Problems of Coordinating and Articulating the New Liberal Studies Major with the General Studies Program

According to the chart on page 3, the units to be considered in the official academic major of the student for the B.A. degree, as distinguished from units credited to general studies, are those in the column headed "thematic program." One of the Ryan Act categories is to serve as an "area of concentration" with 15-18 units selected from it, and 6-12 units to be selected from each of three other categories. Presumably, although this is not specified, most of the 39-45 units will be earned in upper division courses; such is generally the case for academic majors in the university. Problems of coordination and articulation abound in this arrangement.

Although technically, college regulations and bookkeeping practice separate a student's academic major from his general studies program, in the case of this Liberal Studies major designed to meet the requirements of the Ryan Act, it will not be practicable to do so. Clearly, those who formulated this program for approval by the Academic Senate did not plan for any important separation between these two parts of a student's degree program as they specified requirements in terms of elastic unit numbers of 6-12 or 15-18 in various categories of the major to match equally elastic sets of requirements in the same categories for the general studies program. Adding units in these categories in both the general studies and thematic program columns is then supposed to total the 18-24 units (21 plus or minus 3) in each of the categories as required for the 94 unit diversified major required under the Ryan Act.

One obvious problem of articulation among these sets of requirements will bear heavily on the large number of junior college graduates who have completed all of their general studies requirements when they present themselves to embark on a Liberal Studies major at CSU/SF at the beginning of their junior year. Many of them may have accumulated more than 16 units of lower division work in one or two Ryan Act categories of study to which they are most attracted. It is not uncommon to find students who like social sciences, for example, a group of seven different disciplines, to present 30 or more such units on the transcripts of their junior college work. Would such a student, who likes social sciences, be denied the opportunity to take any more work in this area to be credited toward his major? Would all the work in his "area of concentration" therefore be taken in lower division? Would deficiencies in other Ryan Act categories not studied in depth in junior college now also have to be taken at lower division level at CSU/SF because the student lacks prerequisites to enter upper division courses, for example, in the physical sciences?

It is not unreasonable to expect that many students who begin their college work at CSU/SF will face similar problems. Many concentrate on prerequisite courses for a professional degree program other than teaching, then change their minds after two years of college. Many take courses

4English, which comes under Basic Studies in lists of requirements for the general studies program, is given a separate category in the Ryan Act which omits the former category in the way it divides the totality of course offerings at the university.
in departments whose offerings don't fit the categories of either the general studies program or the Ryan Act. What is to be done for them in a total degree program that offers only 10-13 units of free elective work? The problems of evaluating transcripts, holding students to requirements, and advising them how to work out an effectively integrated thematic program under this rubric boggles the mind. And we haven't even begun yet to address ourselves to the special needs of elementary school teachers for teaching the social studies.

The Special Needs of Elementary School Social Studies Teachers: A Dilemma

Neither the demand for thematic programs nor "areas of concentration" embodied in the CSU/SF Liberal Studies academic major are central to the concerns for teacher education which led to the passage of the Ryan Act. These were incorporated in the major program here at the insistence of faculty members who were interested in what they believed to be good academic programs: they wanted to provide focus and depth in the students' programs of studies even when these were to be planned in interdisciplinary patterns. It is important to remember, in this context, that the Liberal Studies major is open to all students, whether or not they are oriented toward careers in teaching. This feature is in compliance with instructions from the Chancellor's staff which had indicated it would not approve any major programs for a B.A. degree that was designed specifically and only to meet the needs of teachers. The Chancellor's Office assumes that teachers do not require special academic training but can benefit from good educational programs planned for the general student. Thus, a basic conflict appears between the thinking behind directives from two off-campus authoritative bodies which both exercise influence approaching control over curriculum development in the individual colleges and universities.

Basic to understanding the Ryan Act is that it was a reaction against the one-discipline specialization not only permitted but strongly urged by the previous California (Fisher) Teacher Credentialing Act of 1962. Legislators were persuaded by school administrators and others that teachers trained under this earlier act were not broadly enough prepared to teach in all subject areas of the curriculum in the self-contained elementary school classroom. So they replaced the old act with a new one calling for diversified training. The requirements for diversification were so broad that most colleges and universities in the state found it necessary to create new academic majors in order to comply with the law and make it possible for their students to receive a teaching license without being required to pass the additional general subject matter examination.

One logical approach to creating such a new diversified curriculum would be to develop a specific list of courses specifically designed to help beginning teachers reach an adequate level of competence in each of the subjects they are called upon to teach. However, the directive from the Chancellor's Office effectively closed off this most direct route to dealing with the problem. Our Academic Senate has approved the thematic Liberal Studies major and degree program and it is now up to the faculty of the School of Behavioral and Social Sciences (and other
academic units as well) to implement it, and to use the framework it provides to work out programs of recommended studies for students expecting to become elementary school teachers.

The big question to be answered now is whether the specific needs of students planning to teach can in fact be met by this new major and degree program. It is too early to foreclose on this possibility. The course requirements for the new major, as they will be stated in the University Bulletin are very broad. If an effective advising system can be developed to guide students through the program, it may be possible to put together different combinations of courses to meet the specialized needs of different groups of students who will technically be registered in the same academic major and degree program. If the Behavioral and Social Science faculty disagrees with the assumption of the Chancellor's staff and is sincerely interested in developing specific programs to help future elementary school teachers become better prepared to teach the social studies, there appears to be room within the new major and degree program at least, to work toward this goal. Undoubtedly some of our existing courses should be recommended for inclusion in the programs of students planning to become teachers more than other courses in our offerings. It is likely that further consideration of the problems of teacher-education will reveal the need for some new courses or new combinations of course materials to be offered by the School in order to serve this goal more effectively. Such a consideration ought to begin with an examination of what is currently taking place in elementary school social studies classrooms.

A Description of the Elementary Social Studies Curriculum

This is an opportune time to undertake such a study. For the past 10 years, significant trends have been developing nationally fueled by federally financial curriculum research and development projects. That such developments have been recognized and regarded as legitimate in the State of California can be seen in the proposed new "Social Science Education Framework for California Public Schools" and in the list of textbooks for grades 1-8 which have recently been adopted for distribution to all schools in the state. The "new social studies" are more than a fad. They are part of the reality of what is going on in the schools. This new curriculum is marked by four major characteristics.

1. The new social studies emphasize teaching the concepts and generalizations of the social sciences rather than merely collections of descriptive data. Of course these can only be understood against a background of factual examples, but in this area of what curriculum


specialists like to call the "cognitive domain," there is a recognition that the body of factual information associated with the social sciences has infinite dimensions and that "mastery" of any sizeable portion of it is impossible. This recognition plus an awareness that descriptive facts are transitory in nature and their relevance to important issues are in constant flux has led elementary educators to focus on developing understanding at higher levels of abstraction even in the earliest years of schooling.

Thus the second grade teacher is urged to focus on concepts of government and community rather than simply listing activities of policemen and firemen in their own. Different courtship customs of different ways of organizing family life are not simply to be described as interesting data; but they are to be related to statements about culture and cultural variability. Children are no longer merely to learn the names of various river systems or which countries' farmers raise wheat and which ones grow potatoes, but they are to come to understand the importance of natural transportation systems to trade and industry and how available natural resources influence economic production.

2. The new social studies curriculum is frankly interdisciplinary. The newly adopted textbooks (and their competitors available for purchase by the individual school districts as supplementary material) are not organized around traditional frameworks of history, geography, or civics. Concepts and general propositions drawn from anthropology, sociology, psychology and economics are as likely to be used as organizing themes for the text materials as those from the more traditional school subjects. The individual chapters and units are arranged in such a way as to make it impossible to say that one year of the curriculum is mostly one school subject than another. They are materials developed for a social studies curriculum.

3. The new social studies emphasize the intellectual processes of inquiry. There is a recognition on the part of elementary social studies specialists that the social sciences can be characterized as ways of acquiring knowledge as well as bodies or organized knowledge previously discovered by others. Therefore, there is an emphasis on students formulating and testing general propositions for themselves through both inductive and deductive reasoning. There are purposeful attempts to teach the skills of inquiry practiced by social scientists including observation, classification, definition, comparison and contrast, generalization, inference, and effective communication.

Tools for the effective implementation of these goals are to be found in the exercises incorporated in the newer text materials furnished to each elementary school child and the guides furnished to the teachers for how to use the texts in the classroom. Suggestions are offered for children to observe social behavior in their own environment, to collect and arrange data, to classify it, and to test the utility or viability of their own classification systems, to formulate and test their own generalizations and inferences, etc. The goal of these exercises is not to teach young children the same sophisticated techniques that are normally taught in college classes and graduate seminars in the social science.
disciplines, but to introduce them to the basic intellectual processes which these refined techniques were invented to further. Children are not, for example, expected to write history with the sophisticated tools of the professional historian, but 6th graders may be presented with two differing versions of the same historical event and asked to detect bias in the authors' writing skills or conclusions about causal relationships which go beyond any evidence that has been presented to support them. They might be asked to write their own versions of an event in their own experience and struggle with the problems of compiling a written account from the best available evidence of what actually happened. Similarly, they might learn to make maps of their own neighborhoods and communities or present economic data that has significance to them in meaningful graphic form.

4. The new social studies emphasizes objectives in the "affective domain" as well as cognitive knowledge and intellectual skills. The learning exercises incorporated in the text materials encourage children to explore their feelings -- their own and those of other people, to consider various approaches to solving disputes among persons and groups, and to analyze value belief systems. Children are encouraged to weigh different notions of what is good, who is a hero, and what values they think they would act upon in specific situations. Within this context, social studies education can be thought of as training for value oriented decision-making.

Even the thought of such a goal is frightening to a good many social scientists who believe they are committed to the basic principle that the social sciences ought to be value free. And yet, this area too involves the use of social science methodologies like careful listening to what the other fellow is saying, skepticism toward commonly accepted beliefs and holding them up to critical examination, and testing the validity of value-oriented propositions by attempting to anticipate the consequences of acting upon them. Viewed in this light, education for affective goals should in no way be viewed as an anti-intellectual activity. Certainly, there are dangers galore. There is the possibility that teachers might try to indoctrinate in favor of some one system of values to which someone else in the school or community will object. And yet, if the school offers no help to children with respect to this aspect of their growth and development, they are ignoring an area in which real help is needed. Knowledge about society and how peoples live, illuminated by the conceptual tools of the social science disciplines, does have implications for value-decision making. This is largely what the cry for relevance in the curriculum is all about. Curriculum specialists who have developed programs in the new social studies have recognized this fact. Now it is time for college faculties that train social studies teachers to see the same relationships.

Basic Concepts and Generalizations -- The Cognitive Objectives

Compiling a list of the most important concepts and generalizations from all of the social science disciplines, including generalizations about historical processes, which ought to serve as the organizing
framework for the social studies curriculum in elementary as well as secondary schools is not an easy task. Nevertheless, it is seemingly an important one, and there have been many attempts to accomplish it. One of the earliest efforts was the list compiled by the statewide committee of scholars and educators in 1961. A similar effort sponsored by state authorities in Wisconsin received wide national distribution in the 1960's. Several of the federally-financed social studies projects which have had an impact on curriculum development and the writing of curriculum materials also began with an attempt to define the most important concepts and general propositions to be drawn from the social sciences.

What has emerged in most of these lists is a consensus which has resulted from repeated conferences with scholars from various disciplines, first within the disciplines individually and then together as a group of social scientists working toward a common goal. To the extent that the lists correspond with each other, and they do to a surprising extent, then there has been agreement on the most important concepts and generalizations which should direct the organization of the social studies curriculum. There may be some differences of emphasis, omission, or exact wording used to formulate general ideas. However, these differences are of minor importance for the purposes of these lists as they are being considered here.

Since children are to be encouraged to formulate, test and refine their own systems of categorization and general statements, the exact way a generalization is phrased in the teacher's manual is not of paramount importance. For instructional purposes the statements placed before the teacher in the guide to text materials should be regarded as orienting statements rather than as basic truths to be communicated exactly as they stand. Whether a specific idea which appears on one list is missing from another is also not a crucial matter. The schools cannot hope to deal with every important concept and generalization ever formulated, tested, and refined by social scientists working in six or seven different disciplines. For most elementary teachers, the curriculum is organized by the materials which are furnished him by his local school district. If he is working with materials prepared by one publisher, he will be oriented to teaching concepts and generalizations which have controlled the selection and organization of content in those materials. If he is working with texts and other media prepared by another publisher, he will be oriented to the same concepts and generalizations which have influenced the creation of those materials.

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What is important for the reader of this document to understand is, first, the range of concepts and generalizations that are likely to appear on most well considered lists that have been compiled with the help of social scientists interested in this problem, and then how the content of these lists is used to plan curricula and influence teaching in the social studies. To satisfy the first of these needs, two lists of concepts and generalizations are included in the following pages. The first is that which guided the development of the curriculum series, The Social Sciences: Concepts and Values, published by Harcourt, Brace & Jovanovich which have been adopted by the California State Textbook Commission in grades 1, 2, 3, and 5, and which are approved as supplementary materials for grades 4 and 6. The second is the schematic framework for the TABA program in Social Science, published by Addison-Wesley Publishing Company. This latter series, although it was published too late to be considered for adoption decisions made in California in 1971 and 1972, is included because of the influence it has had on national curriculum developments and because many faculty members at CSU/SF are already familiar with it. It is a refinement of the curriculum research and development project headed by the late Dr. Hilda Taba of our own faculty.
Relating Concepts and Generalizations to Descriptive Data

The list of abstractions contained in the above lists may be confusing to anyone accustomed to thinking of elementary social studies content in terms of units on the California Indian, Life on the Western Frontier, Japanese Fishing Villages, or Camel Caravans in the Sahara Desert. "Where," they might ask, "has the information gone?" The answer is that information like this or very similar to it may still be found in the curriculum and text materials. However, in the new social studies, the position of descriptive data is always subordinate to the key concepts and ideas it can be used to illustrate or develop. Since it is regarded only as instrumental rather than an end in itself, it can always be replaced by another sample to illustrate the key concept or idea around which the unit is organized. Therefore, while it is possible to say that different sets of curriculum materials are based on very similar sets of concepts and generalizations, they may still vary widely in terms of the specific descriptive data chosen to illustrate an abstraction. To illustrate the concept of socialization in family life, one book might compare the living patterns of Alaska Eskimos with those of a peasant family in rural Mexico. Another might choose to develop an understanding of the same concept with comparative descriptions of family life in a Hausa Village in Nigeria and a family living on its own farm high in the Swiss Alps. Both sets of materials will ask students to compare experiences in their own families with those of children in the families they are studying.

In addition to the fact that each piece of content is organized to illustrate or help develop an abstract idea, there are apparent at least three other principles guiding the selection and organization of descriptive factual content in the text materials. The first, which has already been mentioned, is that these materials are calculatedly interdisciplinary. Concepts and generalizations from all disciplines are found in the curriculum planned for each year and grade level. No year is reserved for any one traditional school subject. A second principle is wide sampling. Descriptive data describing living patterns and man's accomplishments in many periods of history and in many continents and areas of the world today are included in each series in order to give students a wide view of the cultural diversity of mankind. At the same time, efforts are made to show that people from diverse cultural backgrounds share many cultural, biological, and psychological needs and characteristics in common.

The third principle of inclusion, not necessarily a new one to many educators, often goes under the label of "depth study" or "postholing," which means simply that whenever a particular culture, geographic area, or historical period is chosen as the topic to be described, the description is developed in sufficient detail so that students have an opportunity to examine relationships among the various facts which are included in it. The authors include enough information to furnish material "to think about." This means fewer topics, areas, or historical periods can be "covered" in the limited space available; remembering the facts is less important than developing understanding of "key" concepts and ideas.
Relating Inquiry Skills to Cognitive and Affective Goals

Like lists of concepts and generalizations drawn from the social sciences, there have been many attempts to define and categorize the skills of inquiry -- or critical thinking. The proposed Social Sciences Education Framework for California Schools offers a seven category classification of skills of investigating. These are:

1. Observation -- To observe is to look closely, to watch for details, to see units and their various parts clearly.

2. Classification -- To classify is to assign names and ranks to observed things, to set up classes and to place like things in those classes.

3. Definition -- Clear definition depends on close observation and classification. To define a thing is to establish and explain as precisely as possible what it is or the limits of its applicability.

4. Comparison and Contrast -- These two words name the opposite side of the same coin and are inseparable: as one looks at similarities, he necessarily sees the dissimilarities. When one compares two things, he notes specifically the similarities; when he contrasts two things, he notes specifically the dissimilarities.

5. Generalization -- To generalize is to make a statement that is intended to apply to all the members of a class. It is important that students recognize the need to clearly define the class about which they are generalizing, and thus to pay attention to their language and to the demands of the syntax and grammar.

6. Inference -- To infer is to perceive something not explicitly appearing in the thing observed or described. Usually an inference carries one beyond the observable and into the realm of speculation. This speculation is not to be a matter of guesswork. In fact, the teacher must continually discourage the natural propensity to overgeneralize. Educated speculation must be based on clear observation, discrimination, and experience.

7. Communication -- To communicate is to give or send or transmit to another being, by any means (oral, visual, etc.), an idea or a feeling. Communication is such a giving; it is the overt representation of what is in the mind; it is the way we open our minds and ourselves to one another. (Note that communication as a process is not considered as receiving special emphasis at any level. It should, in fact, receive emphasis at every level, for it is the sine qua non of all deliberate education. Students ought to be taught the value of and the need for communication throughout their schooling.)


11 Proposed Social Science Education Framework, op. cit., p. 3.
All of these skills are practiced within what this report labels three modes of learning which are:

(1) Analysis -- In the student's early school years his learning activities and the questions asked him will be calculated to require him to analyze, to look closely and carefully at things in order to identify them and to distinguish one thing from another. For this reason, the teacher's first step will be to direct attention to the processes of observation, classification, and definition. The teacher's second step will be to direct attention to the processes of contrast and generalization with the purpose of examining and explaining relationships.

(2) Integration -- As the student progresses in school, the learning activities and the questions will be formed in such a way as to require the student to integrate, to synthesize, to bring together the things which analysis has allowed him to discriminate clearly. The major processes will be definition, comparison, and generalization. The intention here is to teach students to look for relationships of the parts to the whole. In cultural integration, for example, students will learn to see how such things as mythology, religion, economics, and so forth function as parts of a whole culture. Similarly, in historical integration students will learn to see that cultures, nations, people, and events of the past have a time relationship to each other and to the present.

(3) Valuing -- By the time a student is in high school the teacher should be asking questions that will require him to assign and compare values, to weigh alternatives in order to make qualified judgments about the future effects of present actions. The teacher will emphasize the processes of generalization and inference: the student at this stage will have to recognize problems, deduce alternative solutions to those problems, and make rational decisions about which alternative are best.12

The TABA13 curriculum project refers to the thinking skills to be developed by the curriculum as cognitive strategies and emphasized the development of three of them.

(1) Developing concepts, in which students list, group, and regroup a number of items and then label the groups.

(2) Inferring and generalizing, in which students make inferences and generalize about the relationships they observe among various kinds of data.

12Ibid., p. 4.

13Hilda Taba, et. al., A Teacher's Handbook to Elementary Social Studies, (Reading, Mass: Addison Wesley, 1971)
(3) Applying generalizations, in which students are asked to apply previously learned generalizations and facts to predict what might logically occur in a new situation.

Paul Brandwein, principle author of the state-adoped Harcourt Brace Series, lists six different operations a person is likely to use in thought processes. The thinking person he says: observes, infers, analyses, synthesizes, hypothesizes, and theorizes. He emphasizes, however, that thinking processes are diffuse, they are not necessarily practiced in any order. Sometimes one operation is emphasized, sometimes another by anyone utilizing the method of intelligence to seek explanations of what they observe or find solutions to problems which perplex them.

Brandwein and Taba both emphasize in their theoretical writings that thinking skills are not something to be taught in addition to cognitive knowledge. Exercises for finding data or testing the applicability of general statements are not something to be added to the curricula as supplementary activities. Rather, they are the method by which children acquire new knowledge. The process enumerated by Brandwein above are the ways by which both children and adults develop new knowledge for themselves outside of the classroom as well as in it. The major advantage of the well-directed classroom is that the teacher can provide more opportunities for learning by cutting down random activity. The skillful teacher can arrange or present challenging situations that need to be comprehended or explained; he or she can offer resources which hold information relevant to such comprehension; he can guide students to this data, and he can help provide patterns for comprehending it and making use of it. But, each individual child or adult has to develop a meaning for this data as it relates to what he already knows for himself. Various labels have been attached to this process, the most common being "inquiry," or "problem solving," "discovery," and "inductive learning."

Regardless of what it is called, within this framework the principle role of the teacher is not to present information but to ask questions to which the students are actively to seek the answers for themselves. The information comes from text materials, library and film resources, observation in the environment and from the pupils own varied previous experiences. (One of the questions the teacher should ask is whether the information is valid, whether it can be trusted, but he doesn't have to be the final authority for verification of data either. Students can correct each other, and in case of disputes over what the facts are, be referred to other resources.) In addition to asking questions and defining problems, the teacher also plays the role of clarifier. He moderates discussion and keeps it moving toward the goal of improving understanding. Often this means reformulating what students have said, focusing on questions which seem most perplexing, and helping to define next steps to gain resolution of the puzzle.

An examination of the following several charts from the TABA Handbook should offer the reader a fairly good picture of what it is that both teachers and students do in such a curriculum. The three column organization of these charts should be read both horizontally and vertically. The horizontal organization illustrates the types of questions teachers might ask to initiate thinking on the part of pupils, the types of responses the children might make and the further clarifying operations the teacher might pursue. The vertical organization, especially in the left hand column should give the reader a clear idea of the sequence by which learning can take place as the teacher raises questions related to each other in some logical order. Children learn both by induction and deduction, and facts are useful as they can be related to this process.

Teba, op.cit., pp. 67, 71, 75, 85.
One other point that both Brandwein and Taba agree upon is that values are another form of knowledge. The major difference between knowledge in the "cognitive" domain and in the "affective" domain is that people have more intense feelings about the latter, but they "know" their values and act upon them in much the same way as they do the former. In this sense values are a form of knowledge about behavior and environment, they are learned in the same way outside of school as a result of experience in the culture as other kinds of knowledge are learned outside of school. In school, the teacher can challenge the students' values, belief systems, and call for an examination of them in the same way he calls for an examination of other kinds of beliefs regarded as knowledge, although the examination may call for a different set of questions or a different teaching strategy on the part of the teacher. The process is still one of intellectual inquiry in which the present state of belief is defined and examined with regard to its implications and "tested" by observing what happens when the belief is acted upon. Taba presents the following chart to suggest a teaching strategy which an elementary teacher might follow.
Implications of the New Social Studies for Teaching Training -- What Does an Elementary Social Studies Teacher Need to Know?

To recapitulate, the emerging elementary school social studies curriculum has been described according to four basic characteristics. These are:

1. It is organized around concepts and generalizations drawn from the social sciences; coverage of information is secondary.
2. It is frankly interdisciplinary.
3. It is oriented toward both cognitive and affective knowledge.
4. It is organized so students will learn and practice skills of inquiry as the means to acquiring understanding.

In this curriculum, the teacher's role shifts away from that of a person who presents information and tests to see to what degree pupils have "mastered" it to one who asks questions and helps children find their own answers. He helps them test beliefs they already have and to formulate and test new ideas. The specific information needed for these intellectual processes are found in text and other media materials and in the previous experiences of the students. The textbooks themselves select and organize information useful for understanding concepts and generalizations from a wide range of social sciences, and they offer specific suggestions for student experiences in manipulating information in ways to develop and understanding of the key ideas around which they have been organized. The next question which obviously needs to be examined is, what does a teacher need to know in order to be an effective director of learning in such a curriculum?

Need for Intellectual Content

In seeking an answer to this question, it is fruitless to attempt to specify what geographic, historical, political, etc. information (data) the elementary teacher needs to know. The range of such information is infinite, and both its accuracy and relevancy changes very quickly in a changing world. The specific content samples chosen to illustrate particular general concepts or ideas may vary from textbook to textbook or among courses of study developed for different school systems. Some other way of defining the needs of teacher education must be found other than lists of facts or content samples that might be included in the school curriculum.

A study of what the emerging curriculum actually is leads to the conclusion that social studies teachers need to be familiar with and to understand the key concepts and generalizations from all of the social sciences which are found on the lists which teams of curriculum specialists and textbook writers have used to select and organize content for the social studies curriculum. Such understanding, of course, assumes that teachers
will also have a broad background of facts in their experience which will allow them to understand the meaning of the more general abstractions. However, the list of facts does not have to be specific. The same general ideas can be supported by different sets of data.

Familiarity, and even understanding, of the key concepts and generalizations which are on the master lists guiding the arrangement of the curriculum are not enough, however. Teachers need to know something about the nature of concepts and generalizations themselves general categories of abstractions. He needs to know what they are, how they are developed, and to what uses they are put by social scientists. In other words, he needs to know something about the nature of social science, how social scientists think, how they explain, and how they develop their knowledge. Once they know this, they can make far more effective use of the materials found in the text materials and teachers manuals. Then, to teach the key concepts and generalizations found in these materials, the teacher must be more than familiar with them. He should understand the importance of each abstraction on the list and how and why it might have application to his own living in this world and the relevance it might have for the lives of his young pupils.

Need for Intellectual Process and Skill

The new curriculum is process oriented. Children are to learn the concepts and generalizations of the social sciences through practicing the skills of inquiry. Teachers who wish to direct such learning processes must not only know about the methods of inquiry practiced by the social scientists, they must also be able to practice them themselves. To this end, pre-service teacher education students need to learn to refine their own intellectual skills for inquiry. They need to be able to distinguish facts from opinions and descriptive statements from value statements or explanations. They need to know where to find various kinds of data and how to validate it, and they need to be able to determine if there is sufficient data present to warrant an inference or a conclusion. They need to know how to analyze, synthesize, and organize, how to formulate conceptual categories and explanatory statements and how to test the validity of both. In addition to such general intellectual competencies, the elementary teacher needs to develop some specific skills in social science techniques such as making and reading maps, charts, graphs, historical time lines, and statistical arrangements of data describing the characteristics of a population or an array of data.

Need for Understanding Values

Affective goals are the third dimension of the new curriculum, and in order to implement it, teachers have some needs in this area also. First, of course, they need to know what a value is, to be aware of the difference between value-oriented statements and descriptive or explanatory statements that are value-free so that they can differentiate between teaching strategies for achieving different types of educational
objectives. Teachers need to understand how value conflicts lie at the base of issues affecting American society and interpersonal relations today, and they need to know how to reorganize and define such conflicts in value and how to make choices involving value preferences. Teaching efforts in this area can lead to unfavorable and even hostile reactions in the community environments in which one teaches, and the teachers should not be allowed to go into the effort unprepared. They need to be aware of their own value positions and how these might influence the ways in which they think about a variety of subjects. They need to understand what values are controversial in American society and which ones such as those which support the method of intelligence and the democratic creed of equal rights under the law that the school might seek legitimately to propagate.


In response to this description of an emerging elementary social studies curriculum and the needs of teachers to teach it, does the university need to develop curricula outside the sequence of professional education courses specially tailored to meet those needs? This is a genuine issue.

The Negative Position

Undoubtedly there are some members of our faculty in the School of Behavioral and Social Sciences who would answer this question in the negative: They would maintain that most, if not all our courses are liberal arts offerings in that they have a liberating effect on the minds of students who take them. All these courses teach skills of thinking; at least they should. Many of the faculty favoring this position will encourage all students at CSU/SF to choose one of the existing majors which interests them. If they wish to acquire a teaching license, they can get it by the examination route, by passing the general subject matter exam which the Ryan Act requires the new Teacher Licensing Commission to prepare and administer. The partisans of this position are confident that most students graduating from conventional B.A. liberal arts degree programs will be able to pass such an examination. If the standards for passing this examination are to be derived from norms based on performance of a large number of present generation elementary school teachers, then they argue, any intelligent person who has pursued a conventional B.A. program and has a good general education, experience, and reading background should be able to pass it as well as one who has completed a formally diversified curriculum.

Taking this position is not necessarily demeaning to the intellectual competencies of elementary teachers. Rather it is based on a realistic recognition of the nature of their task and the curriculum they teach. The new elementary school curriculum is based on the recognition that the facts that might be included in it are infinite. This is true of facts
relating to the natural sciences and humanities as well as the social studies. Therefore it is impossible to plan what facts a teacher needs to know. On the other hand, the general concepts and ideas which furnish the organizing structure for the new curricula are relative few in number and appear in substantially the same form on a number of master lists. If they are important enough to be regarded as "key" concepts and ideas to be taught in the elementary schools, then certainly, the argument goes, it is reasonable to expect that they have already been learned, understood, and made part of the thinking pattern of a college student by the time he has finished his general studies program. For his major, he should be free to investigate the discipline, problem, or theme that interest in depth.

There are certain advantages that come with adopting this position with regard to special academic programs for teachers. It calls for no changes. The majority of the faculty can continue to do what it knows best how to do, i.e., to teach programs in the existing discipline oriented programs. They can remain secure in their conviction that there is no need to expend energies on new courses and programs nobody knows how to develop and aren't really needed, if they were developed. Teacher education candidates will not be hurt by such inaction nor would at a later date their pupils in elementary schools. It is reasonable to expect that all capable people will pass the general subject examination. Specific teacher education responsibilities will be left, as they should be, to the School of Education, where future teachers can learn to practice the specific teaching strategies suggested in the elementary school textbooks and the teachers manual designed to accompany them.

Support for this general position does not negate the possibilities for the development of the interdisciplinary and inter-School Liberal Studies Curriculum referred to in the early sections of this report. Faculty interested in developing thematic programs for the B.A. degree will still be authorized to do so, and students preferring to enroll in these programs rather than single discipline majors will have this alternative open to them. Some teacher education oriented students might be included in their group, however they would be free in planning their thematic programs to choose courses which both interest them and relate to their chosen themes rather than be restricted to courses especially recommended for teachers. They would not be handled by advisors any differently than any other students in this broadly conceived curriculum.

The negative position, that no special programs for teachers are required rests on several important assumptions that might be enumerated as: (1) that all or most courses offered in this School at present teach the thought processes and investigative modes of the social sciences, (2) that all generally capable students will be able to pass the general subject test to be administered by the Licensing Commission, (3) that the "key" concepts and generalizations which form the organizing framework of the new social studies in elementary schools are so general they will be understood by all college graduates regardless of what they major in on the basis of completing general studies requirements in high school and college, (4) that responsibility for teaching teachers how to teach
rests with the School of Education. The partisans of this position usually do not deny that these are only assumptions for which supporting data is lacking. However, they claim, the testing of such assumptions is not their responsibility. The burden of proof, they say, usually rests with those who seek change. Unless and until they are offered proof that they are indeed wrong, they feel justified in continuing to operate on the basis of tradition and reason.

The Alternative Position: Developing Special Programs for Teachers

Some faculty members reject all or most of the assumptions in the above paragraph. They deny that needs of future teachers to teach the social studies can be adequately met by a random selection of courses currently offered by this School. Instead, they argue for the development of academic programs specially tailored to meet the needs of this group. Such an effort may not necessarily require the development of a list of entirely new courses. It will involve judgements about which existing courses can contribute to the job which is required. After this is done, attention can be directed to defining the new courses, if any, that are needed.

According to this position, there are essentially two jobs in the academic program for the training of social studies teachers which are so important they should not be left to chance. The first is to help future teachers become thoroughly familiar with the important concepts and generalizations drawn from various social science disciplines likely to be found on lists such as those compiled by Brandwein and T-ba. (See pages 14-16; 24-27; 29-31) The second task which the academic curriculum should accomplish is to give students practice in learning by methods of exploration and discovery, problem-solving and inductive and deductive reasoning. The social science curriculum should not be limited to describing the methods of social scientists, it should afford students the opportunities to practice them. Only in this way, the argument runs, can they be expected to learn to think in patterns they will be expected to teach to their pupils when they enter elementary school classrooms.

Some Alternative Ways of Packaging Courses

Of the two tasks described in the above paragraph, the first -- to familiarize students with a wide range of key concepts and generalizations from the social sciences -- is by far the easiest to accomplish. At least three alternatives for packaging courses that might achieve this goal appear to be worthy of examination. Depending of course on the qualifications and orientation of staff to teaching goals and methods, this first major task could probably be achieved with varying degrees of success by pursuing any one of these patterns. Each, however, has special sets of problems associated with it, problems of staffing, necessity for developing new courses, and articulation with other parts of the student's study programs.
1. A survey of social science disciplines. One approach to consider would be to require students to complete at least one general course in each of six or seven social science disciplines: Anthropology, Economics, Geography, History, Political Science, Psychology, or Sociology. The course in history would be historiography or history as a field of study rather than a survey of any particular historical period. A capstone integrating course similar to the present Social Science 300, which focuses on relations between the disciplines, might also be included as a requirement or an option, depending on faculty deliberations on this subject.

The major advantage of this pattern would be that it would provide a broad familiarity with social science concepts and ideas by means of courses already listed in the Bulletin and offered on this campus. In a few cases, departments might be called upon to develop upper division variants for general courses now offered in lower division, but the work of new course development would be minimal. There would be few scheduling problems; the courses exist and are frequently offered. A second advantage would lie in the ease of articulation with lower division courses taken to satisfy general studies requirements even before the student has declared a choice for a major program. Most junior colleges offer general courses in various disciplines which might easily be credited toward requirements in such a pattern of major studies.

There are potential disadvantages to such a program too. A frequent criticism made against survey courses is that they acquaint students with many definitions and abstractions but do not go into their subjects in sufficient depth to offer opportunities to develop them with any real understanding. The educational results of such a program might therefore be very "thin." A second potential undesirable feature of such a program is that departments usually schedule general courses in very large classes. They use the FTE gained from this practice to finance very small specialized upper division and graduate courses. From an educational standpoint, large classes have disadvantages. There is usually little interaction among students, little chance to learn to think within the pattern of the discipline, and the instructor is forced by circumstance to rely on evaluation techniques which are principally short answer or machine scorable tests. A final potential disadvantage which deserves mention are the staffing practices. General courses are frequently staffed by the youngest, most inexperienced faculty, many times by temporary teachers hired to replace faculty gone on leave. If this were to be true in every department, the future elementary teachers would not have much attention of or contact with the permanent and senior faculty of the School.

2. Allowing students to plan an elective program with the help of an advisor. Obviously, there is room for many variations within this category of plans.

As a beginning, one might consider the entire range of courses offered by the school as the potential pool from which students could select their major. The advisor would be responsible for approving a program that both suited the student's interests in a thematic major and provided him with the opportunities to learn the conceptual tools and principle findings
of the social sciences. Such a program would give maximum freedom to the 
advisor's shoulders to know something about the content and processes 
in each course he is approving. The difficulty of such a task might be 
regarded by some as one of the undesirable features of the approach. 
Its very differences may also be regarded by some as undesirable. Courses 
are scattered. Too few teacher education candidates would be enrolled 
in any one course to make the needs of such students loom very important 
in the minds of the instructor as he planned. Thus, there would be little 
incentive for experimentation or development of new courses specially 
addressed to the needs of teachers.

It would also be possible to provide for joint student-advisor 
selection from a controlled list of courses. Such a list might be begun 
with courses already offered by the School and open to all students. 
New courses, including some developed specially to meet the needs of 
students could be added to it. Among social science courses especially 
useful to elementary teaching candidates would be interdisciplinary 
offerings such as Personality and Culture, Social Change, The Urban 
Environment, Political Economy, Diplomatic History, etc. These need not 
be offerings of the Interdisciplinary Studies Department, but the dis-
tinguishing characteristics would be that they would pull together and 
apply concepts and principles from several disciplines in one course.

If the list of courses were of manageable length, it would be more 
reasonable for an advisor to know what goes on in each course, and he 
could help a student plan a program that would gain him a knowledge of 
key concepts and ideas from all the social sciences. With the list of 
courses relatively short, and therefore sizeable enrollments assured, 
departments might be encouraged to institute new courses to meet the 
needs of an identifiable group of students.

There are problems associated with this proposal too, the principle 
one being how to determine which courses should be placed on the list. What 
criteria should be used to select courses deemed appropriate? Who will 
decide? Then, how will advisors be selected? How will they be trained?

3. Developing a new series of interdisciplinary courses to be taken 
by students in orderly sequence.

The development of such a series of courses would be the result of a 
planned curriculum development project designed to achieve specific goals 
related to the needs of elementary school teachers. The end result of 
completing the entire series of courses would a familiarity with the main 
ideas of the social sciences. The entire sequence would afford students 
opportunities to practice the thinking patterns used by social scientists.

A major difference between this proposal and those under alternatives 
#1 and #2 above is that responsibility for teaching specific cognitive 
and skill goals at certain levels of sophistication could be assigned to 
specific courses. Teachers of the second, third, and fourth courses in 
the sequence conceivably could expect students to possess certain 
knowledge and skills when they entered their courses, and they could build
upon what had previously been learned. It is assumed that with such orderly progression built into the program the possibilities are increased that teachers will be able to take students further along, helping them to refine understanding and skill already learned in rudimentary fashion in earlier courses as they prepare them to enter the next course in the sequence.

Such a sequence would be a new curriculum development at CSU/SF. It would not necessarily be the responsibility of the present Interdisciplinary Studies Department, but it could be a joint effort of interested faculty drawn from many departments in the School. In fact, one of its advantages might be considered that it opens up an exciting avenue for intra-school communication with like minded staff recruited from many departments to engage in a common project. It is perhaps an almost utopian dream to suggest that, if the instructional goals for each course in the sequence were properly defined and effective methods of evaluation developed, it might be possible to use this framework as one through which individual students could proceed at varying rates of speed.

This alternative 3, like the others, has problems associated with it. The biggest one is how to recruit an interdisciplinary staff out of existing departments that will devote its energies to developing a sequence of courses as has been suggested. Another unresolved issue is to determine how many courses ought to be included in the sequence. Should the staff aim to develop a series of as many as four or five related courses? Or should it aim to achieve the most essential educational objectives in fewer academic units, perhaps only two or three courses (6-9 units) and allow students to elect other social science courses that would fit in with their thematic programs of study for a Liberal Studies major or allow them to credit electives taken for general studies credit to be applied to the same purpose.

These problems or articulation and staff recruitment affect the other alternatives 1 and 2 also. Resolving them is so crucial to the success of any program intelligently planned to meet the specific needs of teachers that each requires a more detailed discussion, elaboration of the problem and suggestions for ways of dealing with it.

Unresolved Issue -- Articulation

The Liberal Studies Degree Program, as it was passed by the Academic Senate, does not require specific courses but only numbers of academic units in various subject categories specified in the Ryan Act. (See p. 3) The fact that there are two totals to be considered, first 39-45 units to comprise the actual major for the B.A. degree, which excludes units credited toward general studies, and then 24 units to comprise the "diversified major" required for the teaching license under the Ryan Act, severely complicates all efforts to develop curriculum on a rationally planned basis. According to the chart on page 3 of this paper, a student receiving a teaching license from the college may take as few as 18 units of academic credit in social sciences or as many as 24. Only 6 of these have to be technically
a part of the major. As many as 16 units may be credited toward general studies. There is no specification at all as to how many of these units must be earned at this university.

Most of our students in the upper division of CSU/SF now do not begin their college work here but transfer in at the beginning of their junior year. It is not uncommon for students who like the social science area to present 24 or more credits in history and the social sciences on transcripts of their lower division work. However, completing work in courses carrying acceptable labels does not in any way guarantee that students will have achieved the educational objectives that have been presented in this paper as essential to the training of elementary school teachers. At many institutions, students may take two or three or even four courses in two or three disciplines and amassed 15-24 units of social science credits without even being introduced to important concepts and ideas from other social sciences which are important in the organization of the elementary school curriculum. An additional point, many of these lower division "social science" credits are earned in survey courses where traditionally oriented teachers aim at presenting detailed information that will "cover" the field. Their students often get no appreciation for social science methodologies, how knowledge in the field was developed and verified, or how it can be applied. Students who receive social science credit in such courses would not be getting the advantages of training that is contemplated from any of the three alternative proposals formulated in this report. The hit and miss collection of credits can not even be equated with alternative #1 which calls for a series of survey courses, with a limit to one in each discipline, and capped by an integrating course which would show how the different fields of knowledge can be related to each other. Nor does it seem likely to offer the educational advantages of either alternatives #2 or #3, both of which call for different packages of interdisciplinary courses taught in a process-oriented manner.

The problem of articulating work taken for general studies credit at other institutions with special programs developed at CSU/SF seems to be one of the knottiest to resolve in any attempt to design a program meeting the needs of elementary teachers. If it isn't worked out, whatever new courses and course sequences that are developed on this campus will not reach large numbers of students who will have "completed social science requirements" before they ever get here. Or, if they haven't completed all requirements elsewhere, they may enroll here in only part of a sequence that has been planned as an integrated whole.

If there is to be a solution to this problem, it will have to be arbitrary. Some decisions will have to be made about how many units of social science courses credited toward the Liberal Studies major will have to be taken in upper division courses at CSU/SF. If it is to be as few as six, perhaps these could be satisfied by a process oriented interdisciplinary sequence as suggested in alternative #3. Then students who had more room in their programs could take a series of interdisciplinary courses as suggested in alternative #2 or feel out their programs with more courses to fit in with the thematic principle. Perhaps all students could be required to take at least six units in upper division courses at this school.
and those students looking to social science as their field of emphasis might be required to take 15-18 in this category. Perhaps the only really sensible solution is to convert to a system whereby competency in social science, with regard to both cognitive and skill goals, for purposes of eligibility for a teacher's license would be established by an examination system rather than by counting academic credits. These decisions to make academic work required are hard to make. They may add to the total numbers of units required for graduation for some students, who make decisions to change majors or were ill-advised where they went to school before they entered CSU/SF. However, if some decisions are not made in this area, educational planning will come to naught, as each professor and each student is left free to "do his own thing."

Unresolved Issue -- Staffing

It has been emphasized throughout this report that the "new" social studies cannot be characterized by its cognitive elements alone, but skill and affective objectives are of equal importance. Hence courses planned to meet the needs of teachers cannot be planned only in terms of developing understanding of important concepts and generalizations, but they ought also to emphasize processes of learning which teachers are expected to direct in their own classroom. College students planning to be teachers need many experiences in learning how to learn by means which have been categorized in previous sections as "discovery" or the investigative methods of social science. They also need many experiences in relating the cognitive information and abstractions they are learning to making value judgments and value choices, also processes they will be expected to repeat with their own pupils.

When considering the possibilities for course and curriculum developed directed at the needs of elementary teachers, it is a very practical question to ask how many faculty members we now have on our staff who are prepared to offer such experiences in their classrooms. How many faculty members do we now have who base their teaching on the assumptions of the new social studies? How many aim to teach an understanding of major concepts and generalizations rather than directing their efforts to "covering" an immense range of descriptive data which students are expected to commit to memory. How many evaluate for how well students understand general principles rather than how well they remember specific examples? How many permit or encourage students in their classes to conduct investigations and discover or test knowledge for themselves rather than require them to accept the teachers answers as correct? How many attempt to teach investigative techniques in courses not formally labeled "research methodology"? How many provide or encourage discussions in which students can relate the subject matter of the class to value issues which concern them?

Any attempt to answer these questions would be pure guess. The required information is simply not available. Certainly, a look at syllabi and examinations from many courses offered in this school would suggest that for many of our faculty teaching seems to be defined as a matter of communicating information which students are to remember and give back

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Little, if any, opportunity exists in many of our classes
for students to discover for themselves, to hypothesize, and theorize
and test out their ideas against their own experience or data systematically
compiled as part of class activity.

Just as certainly, the ideas presented in this paper are not new to
many of the faculty of the school. Many of them have had years of experi-
ence teaching interdisciplinary and single discipline courses aimed at
developing broad concepts and ideas. Many of them have had a process
orientation toward skill development as part of the class activity.
Many have done both. Who are they? How many do they number? Some estimate for answering these questions seems necessary before determining if
it would be possible to mount an effective program of courses to meet the
needs of elementary teachers. Any plans for the number of such courses
must be limited by the availability of faculty to teach them.

The development of any new program by a faculty which already has
assigned responsibilities is never an easy task. Long hours must be spent
by those who actually will participate in teaching the new program in
planning for what it will be like. If those who have power to make staff-
ing decisions and allocate resources within the School of Behavioral and
Social Science are really interested in the problems raised by this report
and are anxious to develop courses or curricula specifically addressed to
the needs of teachers, the first step must be to designate the persons
who will teach in such programs and make it possible for them to grapple
with the problems of detailed design.

In order to achieve these ends, the leadership must come to grips with
three related problems for which solutions must be found. These are:
(1) how to identify those faculty members who are able to teach in courses
planned especially for elementary teachers within the framework of needs
spelled out in this report; (2) how to motivate these faculty members to
want to develop and teach courses for such a population; and (3) how to
make it possible for them to do so. Additional problems closely related
to this last one are: (a) how to interest departments to assign some of
their more creative and capable people to what are, in the eyes of depart-
ment chairmen, services courses as distinguished from courses serving the
departmental major; (b) how to provide time for planning and evaluation
of the new courses and curricula; and (c) how to provide reward as well
as satisfaction to faculty members who participate in such a program.

The problems of curriculum design are always complex in themselves.
If the problem of staffing for such projects is not solved in the beginning,
it is very unlikely that other aspects of development work will ever get
off the ground.
Summary

The Ryan Act has mandated a change in the licensing of elementary school teachers. It authorizes colleges and universities to license directly only those who have graduated from an 04-unit "diversified" degree program which has been approved by the State Teacher Licensing Commission. Graduates with other majors can teach only if they can pass a general subject matter examination which the Ryan Act has mandated the Commission to prepare and administer.

In response to this situation, the Academic Senate at CSU/SF has approved a complex new 36-45 unit Liberal Studies major for a B.A. degree which when combined with 40 units of general studies credit will satisfy the Ryan Act's demand for a diversified degree program. The new major does not specify any required courses but only unit totals for broad categories of study which are the same as those listed in the licensing law. There are many problems associated with this new major of advising students, articulation with general studies work, and the acceptability of transfer credits still to be worked out. It is open to all students, not only teacher education candidates, and according to its advocates is especially to be recommended to students seeking to work out themetic programs. The purpose of this report was to study the possible contributions the School of Behavioral and Social Sciences might make to the education of elementary teachers within the framework of the new major and the new law.

This new licensing act is taking effect at the same time that great changes are taking place in elementary school social studies. A "new" social studies is emerging and is reflected in a proposed new framework for social science education prepared under the auspices of the State Department of Education and in the new textbook materials recently adopted for use in the California schools. The new social studies can be described according to four principle characteristics: (1) cognitive goals stress development of key concepts and generalizations from the social sciences rather than a definite body of information; (2) it is frankly interdisciplinary; (3) it is process oriented with students learning for themselves by utilizing investigative methods of the social sciences rather than merely accepting covert answers from the teacher or textbooks; (4) it also stresses affective goals and teaches children to weigh values and make value choices.

Teachers have some specific needs in order to help children learn in such a curriculum. They need to understand the nature and importance of concepts and generalizations and their uses to social scientists, and they need to know something about the basic findings of all the disciplines. They need to know how to think and learn like social scientists do, and they need to know about values and how to think about and resolve value conflicts.

With reference to the curriculum for teacher education, the first basic decision that must be made is whether these needs can be met only by a series of deliberately designed courses, or whether one can assume that most courses now offered in the School of Behavioral and Social Sciences make contributions to achieving these goals, and that the sum total can
satisfactorily be achieved by following almost any major program that might be put together. For those who make the latter assumption, the desirable educational policy is clear. There is no need to develop special courses for teachers, and teacher education candidates present no special responsibilities to the faculty of this school. They can be enrolled in a thematic major of their choice under the Liberal Studies Degree Program or they can be advised to pursue any major of their choice and then take the general subject examination offered by the State Licensing Commission.

Another position is that the university has a responsibility to ensure that future social studies teachers will have certain experiences as part of their pre-professional academic training as college students. This calls for a series of specially designed courses that will emphasize broad interdisciplinary cognitive knowledge, process orientation toward the development of investigative skills and through patterns used by social scientists and attention paid to making the cognitive knowledge learned relevant to the value conflicts of our time. Three alternative patterns of specially designed courses are explored. Each has both advantages and disadvantages. Problems which must be overcome are associated with each of them. Under certain circumstances a curriculum incorporating some combination of features found in all three patterns might be feasible.

Two more problems are singled out for special consideration. The first is that of articulation between social science courses to be taken at CSU/SF to be credited toward the Liberal Studies major and credits earned for general studies or transferred from another college. Because of the vagueness of the requirements and the method of adding units together from several elastic categories, one cannot specify how many units will be available for a curriculum of courses specially tailored to the needs of teachers. Some arbitrary decisions will have to be made before serious development work can be begun.

The second set of special problems has to do with staffing. Some of our faculty members are more interested in and capable of teaching the kinds of courses envisaged in a program to meet the special needs of elementary teachers than others. If the leadership of the School is interested in encouraging this kind of development, it must take steps to identify who can do the job and then resolve a number of problems so these persons can be encouraged and helped to actually get it done. In the final analysis, new curricula are the products of teachers who actually teach it.