A study was conducted at Cerritos College (California) to determine the effects on classroom learning of instructional innovations developed as a consequence of released time grants, and to determine if released time grants for program development in the college's Social Sciences Division should be continued in light of a 50% decline in grant applications. Analyses of performance and retention rates for multimedia and individualized courses developed under the grant program and traditional sections of the courses were inconclusive. A survey of division faculty revealed that, although a great majority felt the grants were a sound investment, two-thirds had never applied for a grant due to perceived administrative encumbrances or unwillingness to be held responsible for results. Only 40% indicated they would consider applying if more assistance were given by the division chairman. A survey of eight other division chairmen found that six chairmen felt their divisions were still actively participating in the grant program, but five reported the same applicants constantly re-applying. Half claimed considerable counseling of applicants. On the basis of the findings, recommendations are made for improvements in grant program policies and procedures. (BB)
PROGRAM DEVELOPMENT RELEASED TIME GRANTS
TO FACILITATE LEARNING IN THE SOCIAL
SCIENCES AT CERRITOS COLLEGE, 1971-76

BY

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Introduction

Context of the Problem

Non-traditional teaching methods, course objectives and instructor accountability have become descriptors for commonly used educational innovations. Learning theories have recently emphasized practical and applied methods of dispersing information through such non-traditional formats as self-paced, computer assisted and taped cassette approaches. With students now encouraged to achieve content proficiency and course mastery at their own pace, with criterion referenced testing challenging the traditional class curve in grading, it has become painfully evident that we must create a "new staff for new students" at the community college level (O'Banion, 1974).

Enticing college faculties to accept the methodological possibilities offered by these innovative learning processes has usually entailed creating staff development programs which have, in turn, resulted in institutionalizing program development grants (O'Banion, 1974).

Some program development grants have not realized anticipated learning theory objectives for some instructors when tried in the classroom. Such setbacks, whether institutionally or individually induced, should not discourage faculty from attempting instructional innovations. America's community college faculty must be assured of their "right to creative failure" in attempting to improve their instructional techniques (Lefforge, 1971).

The Problem

Reacting to a recommendation by the Western Association of Colleges and Universities during accreditation, the Dean of Academic Affairs at Cerritos College announced in September, 1969, that the administration had
decided to grant instructor released time for program development. Four project categories were delineated, all of which were specifically intended to either enhance student learning or to encourage new instructional curriculum and techniques within existing programs. Specific criteria had to be followed in drawing up each application, including a statement of purpose, intended instructional improvements, application and conduct, effect upon classes and students, and projected costs.

These grants were to begin during the Spring Semester, 1970, and were to be offered to the faculty in multiples of single teaching units up to a maximum of three units per semester.

In an effort to avoid instructional complacency and to mitigate against the inevitable consequences of repetitive teaching in multisection courses, Cerritos College began a financial commitment toward the improvement of instruction six years ago which now amounts to over thirty-two thousand dollars each year.

The Social Science Division at Cerritos has been participating in this program since the Fall Semester, 1971. During the last five academic years the division has been granted a total of sixty-six teacher units of released time. With fifteen units constituting a full instructional load for the semester, the division's allocation has amounted to complete released time for one instructor for nearly four and one-half semesters. On the average, this total has represented around fifteen percent of the college's total grants for any given instructional year.

With the exception of academic year 1973-74 when twenty-one teaching units were approved, the division has averaged two three unit released time grants each semester. Fifty-one teaching units (77%) have been allocated for the Department of History, twelve units (18%) to the Administration of Justice Department (AJ), and three units (5%) for the Sociology Department.
In history, all grants were for multimedia instructional innovations, including programmed cassette tapes and slides to alleviate the monotony of lectures. Nine of the twelve units in AJ were given for the development of a Personalized System of Instruction (PSI) method with computerized instruction in one course. The sociology program development units involved the creation of tapes to be used in the Women's Studies Program.

All applicants were requested to submit in writing a description of their project in proper format with adequate justification the semester before it was to start, and were required to submit a follow-up report on the progress of the venture the semester after its completion.

Significance of the Problem

The Social Science Division has both large classes averaging over fifty students per section, as well as limited instructional "software" at its disposal. If curriculum innovation and the application of current learning theory precepts was to be considered under such conditions, instructors' expertise and ingenuity had to be tapped. Since program development released time seemed the best way to achieve this, a study of division grants was undertaken to determine both the effect upon classroom learning and the advisability of soliciting additional projects in this era of stabilizing college enrollments and revenues.

Goals and Purposes

The general goal of this study was to determine if the college should continue to fund program development released time units in some or all of the Social Science Division's disciplines based upon each department's instructional needs.

Specific purposes of this study attempted to investigate:

1. Whether the funding of self-directed taped programs in history was instructionally effective and financially efficient when compared to the
traditional lecture classes;

2. Whether the PSI approach in the AJ class with computer assisted instruction constituted a desirable learning approach in AJ, and whether it should be attempted in other disciplines with additional grants;

3. Whether other departments within the Social Science Division should be administratively encouraged to request more released time grants;

4. Whether the division had become complacent in not requesting as much released time as other college divisions;

5. Whether other alternatives for improvement of instruction existed (conferences, in-service workshops, directed study, and sabbatical leaves) which were just as instructionally effective and financially attractive as program development;

6. Whether instructors who have participated in these grants feel their teaching style has been improved or student learning has been enhanced because of learning theory innovations derived from these grants.

Expectations and Institutional Impact

With reference to the specific purposes listed above, it was hypothesized that this study's institutional impact would have:

1. Implied that programmed tape presentations in History 27 encouraged additional small group discussion which cognitively reinforced concepts acquired on tape;

2. Showed a slightly lower "retention" rate in the programmed tape History 27 classes;

3. Substantiated a considerably reduced "retention" rate in innovative PSI AJ 4;

4. Indicated a higher percentage of "successful performance" grades relative to the total persisting student population in programmed taped History 27;
5. Verified that "successful performance" grades were significantly higher in PSI AJ 4 relative to the persisting population;

6. Inferred that PSI AJ 4 and programmed tape History 27 persisters have a higher tolerance for ambiguity, a stronger need for task closure, a greater degree of self-motivation, and a more pronounced ability to perceive the totality of the instructional program than traditional lecture students in both subjects;

7. Affirmed that non-participating instructors from the Social Sciences preferred not to change their instructional approaches or were convinced that their format was best;

8. Emphasized declining participatory interest on behalf of the Social Science faculty in the program relative to faculty from other divisions;

9. Encouraged the college to continue offering a variety of incentives and inducements for the faculty to engage in applied learning innovations because many faculty would not give up their teaching loads for released time grants;

10. Reflected a certain ambiguity on behalf of some participating program development faculty from the Social Sciences who believed the concept to be commendable and the potential education benefits to be sound, but who feared lack of student interest.

Definition of Terms

**Computer Assisted Instruction.** Part of a class' instructional assignment (such as problem solving or examinations) is put on computer tape. Students use these computer terminals to engage in self-study and self-testing, with immediate instructional feedback as to right or wrong answers.

**Course Objectives.** To insure student awareness of designated goals and objectives for a given course, an instructor is encouraged to outline
his expectations, teaching approaches, and testing formats.

**Criterion Referenced Testing.** Students are tested from the predetermined goals and objectives for a given course, and their grades are determined from their mastery of the material.

**In-service Training.** Faculty are encouraged to attend a variety of activities (classes, workshops, and self-study programs) which enhance their teaching styles while under employment as part of a staff development program.

**Instructional Software.** A category of teaching aides from audio-visual sources, multi-media programmed packages, and computer terminal programming which instructors can make use of in teaching their classes.

**Instructor Accountability.** A current learning theory precept which maintains that an instructor should be responsible for student performance standards based upon predetermined course goals and objectives.

**Non-traditional Teaching Methods.** Any teaching technique which emphasizes non-lecture/discussion (traditional) methods is considered as innovative and non-traditional. No comparative assessment is intended unless indicated.

**Pre-service Training.** New faculty are expected to participate in basic institutional and instructional orientation meetings prior to their first class.

**Program Development Grants.** An institution's commitment (financial or released time) for the encouragement of staff to consider researching new teaching methods for their existing courses.

**Released Time Grants.** Some institutions permit an instructor to have a percentage of his normal teaching load (usually one-fifth) off in order to encourage him to engage in program development studies.
Retention Rate. This percentage figure corresponds to the number of students earning a grade in a given course relative to the number initially enrolled.

Self-paced Instruction. Often called PSI (personalized system of instruction), this educational innovation requires students to move through a course's curriculum at a rate commensurate with the time necessary for them to achieve mastery of the material. They can not advance to the next unit until mastery is achieved.

Successful Performance Grades. For the sake of this study, "A", "B", and "C" grades are considered indicators of successful achievement. Highly successful performance would be limited to "A" and "B" grades.

Taped Cassette Education. Usually called programmed instruction, a student is responsible for the viewing and/or listening to part of a class instruction content outside of the formal classroom. Class time is then devoted to analyzing and discussing this material acquired by the student in lieu of a lecture.

Teaching Unit. This constitutes the basic measurement in determining an instructor's teaching assignment load and salary rate. Most community colleges assume that fifteen teaching units constitute a full-time instructional load.

Literature Review

Endorsement of and funding for staff and program development projects in America's community colleges has been a relatively recent phenomenon. As recently as the mid 1960's, Thornton warned that either a community college will prepare and permit its staff to teach excellently or it will fail completely as an open door institution (O’Banion, 1974). Although Thornton's warning has been partially heeded with program development assistance grants existing nationally, a multitude of interpretive and
manipulative problems remain unanswered.

At the outset of this decade the National Advisory Council on Education Professions Development (1971) proposed two recommendations. The council concluded that national attention must be given to developing creative and well designed in and pre-service programs for faculty, and priority must be assigned in these programs to meet the needs of socio-economically disadvantaged students. The dual responsibility to encourage faculty renewal and instructional accountability was clearly implied.

The National Advisory Council on Education Professions Development (1972) in its summary re-iterated both the lack of in and pre-service educational programs nationally, as well as the inappropriateness of many of these programs which are in existence. Attention should be given to finding imaginative and effective ways to implement educational development programs, the council inferred. The council further stressed that immediate assessment should be undertaken to determine the educational needs of those who staff "Democracy's Colleges." Concluding, the council emphasized that:

The community-junior college has the commitment and the programs; if society provides the staff and the other resources, the human condition can be advanced dramatically in the 1970's (page 16).

Florida was among the first states to legislate funds for program and staff development through its Division of Community Junior Colleges within the Department of Education. As early as 1968, a sliding annual state budget commitment of three to five percent for staff and program development was adopted (Florida State Department of Education, 1973). This 1973 report defined program development as encompassing research, planning, evaluation, faculty retraining, and equipment needs which related to methodological teaching improvements within existing course or programs.
This money was not intended to be used for the expansion of existing programs or for the addition of new course offerings.

Florida's Department of Education in its 1972 report outlined a comprehensive activity performance list which had to accompany each application (people involved, time envisioned, places visited, things undertaken, and evaluations planned). The state board indicated its intention of assessing and rating the educational value of each proposed activity.

California's largest community college district, Los Angeles, has been actively engaged in program development released time grants for more than five years. The Los Angeles Community College District's 1973 report on instructional development emphasized that these grants were intended to encourage developmental work by the district's faculty in designing innovative instructional approaches which would have a positive impact on the learning process. The report indicated specific criteria used by the district in determining budget limitations for these grants as well as procedural steps to follow in making application requests.

Both Johnson (1972) and Levien (1971) affirmed that more attention must be given to program development, and that careful scrutiny should be given to both administrative financial supports and faculty financial incentives.

Lefforge's (1971) itemization of the benefits derived from a well-organized in-service program, including program development, estimated that such a program would: 1) develop a climate for educational innovation, 2) develop individual initiative in professional growth, 3) coordinate the institution's training resources, and 4) increase instructional accountability.

Inherent difficulties between administration and faculty often surface when an institution creates an office for program and staff development.
As De Bloois (1975) frankly admitted:

In the early stages we may have felt that we had some answers about what professors should do to improve their instruction, but it didn't take long for us to see that we had to be pretty careful about telling people, "This is what you ought to do" (page 5).

De Bloois and the Utah State administrative staff utilized an advocacy approach instituted by the faculty to determine what instructional changes should be encouraged and sponsored.

The University of Illinois survey (O'Banion, 1974) on developmental needs at Lincoln Trail College concluded that there was not enough administrative attention devoted to staff and curriculum development programs. O'Banion's conclusions would probably reflect the basic dilemma facing many community college administrators in 1973 who sincerely professed a willingness to encourage development programs but who were confused and uncertain as to what should be done institutionally.

California's Orange Coast Community College District is looked upon in its section as a model for organizational and operational "software" planning in the field of program development. Yet, as recently as 1971, Brightman of Coast had this to say about the lack of administrative initiative in general:

Despite widespread tongue clucking at the paucity of aggressive administrative programs to stimulate faculty invention, few administrators have really gone to bat.

Brightman conceded that initial stirrings were evident in this area, but decried the absence of published literature dealing with administrative guidelines for undertaking program development projects.

Hill's 1971 study, done in conjunction with Blocker and others from Harrisburg Area Community College resulted in a positive statement of anticipated administrative benefits to be derived from planning and implementing an in-service program, as well as concrete strategies for
administratively operating such a program within the existing administrative structure. Interestingly, the Brightman and Hill studies, both published in 1971, presented contrasting pictures of administrative roles in program development grants, thereby highlighting a common assumption that most administrators follow national trends within the guidelines imposed by their district's budget.

Recently, as the Sharpes (1974) study pointed out, reference guidebooks have appeared to assist administrators in setting up the program development offices which are better equipped to provide assistance to the faculty.

One national administrative problem relative to program development has rarely been recognized, let alone dealt with. Unless administrators communicate their desires for innovation to the faculty, and listen to faculty responses, learning innovation will not percolate down to most classroom teachers (Evans, 1969).

Faculties are jealous of their prerogatives and expertise in subject matter content and are quite suspicious of outside pressures which threaten to impose standards upon them from above. De Bloois (1975) and his colleagues at Utah State began with this premise and pursued it to its logical conclusion. If faculties continue to insist upon following their own methodological styles in the classroom, any program development effort must revolve around this assumption to succeed.

Some sources stressed the need to make faculties more aware of the possibilities for potential improvement of instruction (Holloway, 1974; Mann, 1975). Convincing a complacent faculty (Mann, 1975), or one without real commitment to instructional innovation (Holloway, 1974), to experiment was found to be difficult. Faculties have tended to inherently resist change (Brightman, 1971).
Sources agreed that it was not easy to find sophisticated and subtle ways to motivate a reticent faculty (De Bloois, 1975) which has become strongly entrenched in traditional lecture teaching styles (Ohio Board of Regents, 1973). The solution proposed by Hill (1971) was to find those special conditions under which most faculty will depart from traditional educational practices and evince a willingness to engage in instructional innovation. Colleges must identify faculty characteristics which demonstrate flexibility toward change agents, while subtly encouraging the staff to innovate through examples, incentives, and peer pressures (Hill, 1971).

The ideal faculty for the community college, as Blocker (Hill, 1971) mentioned as far back as 1965, would contain departmental specialists, generalists, and student oriented teachers. Each element can and should be encouraged to reassess its teaching methods, and individually be encouraged to participate in program development teaching grants.

Mann (1975) discovered while evaluating faculty acceptance and participation in such projects that "age, sex, tenure, previous position, amount of salary from project funds, promotions, and percent of time devoted to project activities" did not seem to make much of a difference (page 22). Mann found that instructors who changed their attitudes and behavior, or adopted projects to improve instruction, were already partly dissatisfied with their teaching performance.

Both Lefforge (1971) and Lindquist (1975) stressed the importance of administrative and institutional support if a hesitant faculty was to be persuaded to participate. Although this support was often financial, or given in released time grants, neither author wished the reader to ignore the teacher's real psychological need for reassurance and praise.

Mann (1975) emphasized that faculty engaging in program development grants should be encouraged to develop their own materials. Only then will
the faculty member effectively incorporate "software" techniques perfected during the grant in the actual classroom situation. This advice was found to be essentially sound by Worthington (1971) as the only way of combatting complacency by vocational-occupational staffs toward innovative teaching techniques.

The best method for implementing and administering program and staff development grants has been widely debated in related literature.

Richardson (1975) propounded four steps which he felt would aid any small college starting program development without the assistance of a special office. The institution was encouraged to: 1) establish a receptive climate with key faculty departments involved, 2) organize and train a staff development committee for general supervision and consultation, 3) plan the goals and methods of implementation beforehand, and 4) maintain and assess the plan's effectiveness in meeting institutional and instructor expectations.

Cohen's 1973 treatise provided an especially helpful section on in-service training and methods of curriculum presentation for faculty interested in learning theory experimentation.

Smitheran (1973) of California's Rio Hondo College stressed the importance of assessing the working relationship among budget resources, faculty motivations, physical plant limitations, and student instructional needs. No program development innovation should be attempted without total institutional commitment and priorities firmly established, Smitheran warned.

Florida's Department of Education report (1974) on staff and program development projects analyzed how statewide grants were allocated according to both college needs and available resources.

Embree's 1975 study of Chicago's Central Y.M.C.A. College affirmed the need for initial faculty involvement, not just in the proposal stage, but
in drafting a five-year master plan. Such long range staff involvement not only encouraged faculty commitment, Embree claimed, but insured necessary budgetary funding for program development projects.

Hill (1971) listed six procedural steps necessary to affect faculty involvement in curricular innovations: 1) presidential leadership, 2) proper personnel selection procedures, 3) faculty orientation, 4) continued professional development, 5) a system of reward for effective performance, and 6) adequate support services.

Rogers (1971) emphasized the necessity for practical application of learning theory innovation by the faculty in program development grants; while Luskin (1971) championed faculty performance contracting as the most effective means of assuring completion of the program grant's goals. These faculty agreements would run for more than just one semester, Holloway (1974) estimated, for the grants studied in his report averaged over two years in duration.

Once a development office has been created, specific application procedures can be outlined. De Bloois (1975) catalogued the Utah State office's functions as: 1) faculty awareness orientation, 2) assistance for faculty starting innovations, and 3) providing suggestions which would enable the professor to better meet student related expectations.

The Los Angeles Community College District report (1973) was explicit as to the eligibility requirements, duration of the project, criteria used in evaluation of the applications, recommended proposal models, budgetary procedures, publishing rights, teaching aides permitted and use of such materials developed under the grant. In addition, general goals of the district were summarized as: 1) providing incentives for faculty beyond their normal assignments, 2) extending faculty capabilities to meet changing instructional student needs, 3) enhancing teaching and learning in the
classroom, and 4) encouraging the development and utilization of new learning theories and media.

Linker (Holloway, 1974) recommended that most all released time program development grants should reflect broad institutional instructional goals.

Finally, both Lefforge (1971) and O'Banion (1974) reiterated the need for program assessment to ascertain if the development grant satisfied its predetermined goals and instructional objectives.

Method

Procedure

In order to carry out the above-mentioned purposes, seven procedural investigations were conducted.

"Retention" percentage rates were compared for those U.S. history classes (History 27) taught by an instructor who had both traditional and programmed taped classes at comparable times of the day. "Successful performance" ("A" through "C") percentages were also contrasted for these sections. Eight sections of required History 27 were involved during a four semester period (two sections per semester). Programmed, modular History 27, developed under released time grants, accounted for four sections during the Spring 1973 and the Fall, 1973; while traditional lecture History 27 covered four sections during the Fall, 1974 and the Fall, 1975.

Reference was made to a previous statistical comparison of "retention" and "successful performance" rates for AJ 4 taught by the same instructor through both traditional lecture and PSI methods (Personalized System of Instruction, developed under grants). These results were taken from the author's earlier study done for Nova University entitled: "Evaluative Comparison of
Programmed System of Instruction and Traditional Lecture Approaches in a Basic Administration of Justice Class at Cerritos College (ERIC ED 114 143). Four sections of AJ 4 were contrasted during academic year 1974-75, with a traditional lecture and PSI class studied each semester.

All full-time instructors in the Social Science Division were requested to answer a questionnaire to ascertain what additional administrative assistance could or should have been provided by the division office in program development released time applications.

Other division chairmen at Cerritos were polled to determine what they had found to be the most expeditious way of encouraging instructors to make application for program development grants. Other alternate incentives were examined.

Records from the Dean of Academic Affairs and Dean of Vocational Education offices were consulted to determine numerical comparisons with college applicant totals. Candidate justifications and final reports were also studied for these non-Social Science Division applicants.

Interviews and discussions were conducted with program development participants from within the division in order to categorize their impressions and recommendations pertaining to the effectiveness of applying newly devised learning theories from these grants in their classes.

A literature review search was undertaken in order to discern the philosophic and practical directions taken by sister institutions of higher education in creating offices for instructional program development grants.

Data Analyses

A comparative linear analysis of "retention" and "successful performance" percentage rates for sections of basic U.S. history (History 27) was undertaken. No statistical comparison or graphic presentation was attempted.
The proportional percentage comparisons for "retention" and "successful performance" rates in traditional lecture and PSI AJ 4 were listed in descriptive fashion. Results of the previous chi square test at the .05 level of significance were included (See Appendix "C" for comparative tables).

Survey Instruments

After discussion with the Dean of Academic Affairs, two division chairmen, and participating Social Science faculty, two questionnaires were developed. All division chairmen who supervised graded classes were given the copy developed for them. Every full-time staff member of the Social Science Division received the division questionnaire (See Appendix "A" and "B").

Administration of the Surveys

All eight division chairmen to whom the questionnaire had been distributed returned the survey, half with written comments.

Fifteen of the twenty-two (68%) full-time faculty in the division returned theirs, one third with comments.

Analyses of the Questionnaires

Responses on each questionnaire were tabulated manually and converted into comparative percentages.

Written comments on both questionnaires were examined and, because of the limited number of responses, transferred to the questionnaire result sheets (See Appendix "A" and "B").

Results

"Retention" percentage rates for programmed, modular History 27, when contrasted with traditional lecture History 27, resulted in no observed differences for the four semesters surveyed. The "retention" rate for four
sections of programmed, modular History 27 (Ss=318, 71%) compared favorably with the "retention" rate for four sections of traditional History 27 (Ss=334, 71%).

"Successful performance" rates for programmed, modular History 27 showed much the same absence of contrast when compared with "successful performance" percentages for traditional lecture History 27. The "successful performance" rate for four programmed, modular sections of History 27 (n=208, 65%) equated favorably with the "successful performance" rate for traditional sections (n=214, 64%).

The "retention" rate for the two sections of traditional lecture AJ 4 (Ss=108, 77.8%) showed significance beyond the .05 level of confidence when compared with the "retention" rate for the two sections of PSI AJ 4 (Ss=81, 61.7%) (See Appendix "C").

"Successful performance" percentages indicated significance beyond the .05 level of confidence when contrasting rates for PSI AJ 4 sections (n=50, 61.7%) with rates for traditional lecture AJ 4 classes (n=84, 77.8%). All students who finished AJ 4 earned "successful performance" grades (See Appendix "C").

"Highly successful performance" grades ("A" and "B") indicated significance beyond the .05 level of confidence for PSI AJ 4 (n=48, 59.3%) when compared with the same rate for traditional lecture AJ 4 (n=51, 47.2%).

The "highly successful performance" rate for programmed, modular History 27 (n=141, 44%) contrasted markedly with the rate for the traditional classes (n=92, 28%), exhibiting a continuous decline throughout the survey period.

The questionnaire given to the Social Science Division (See Appendix "B") indicated that eighty-seven percent (87%, n=13) of the faculty were
aware that program development released time teaching units were available. Two-thirds (67%, $n=10$) of the division's responding full-time faculty had never applied for a grant. Forty-seven percent (47%, $n=7$) of the respondents (and 87.5% of former grant recipients) claimed that they would seek another grant. Two-thirds (67%, $n=10$) felt that more publicity should be given to these available grants. Only forty percent (40%, $n=6$) indicated that they would consider applying if more assistance was provided by the division chairman. Eighty percent (80%, $n=12$) expressed an opinion that these financial released time unit grants were sound ways to improve instruction. The majority of respondents (60%, $n=9$) preferred to develop new learning theory innovations with assistance provided by these grants. A "not applicable" response accounted for at least twenty percent (20%, $n=3$) of the responses to the last three questions.

The division chairmen's questionnaire (See Appendix "A") on the amount of administrative assistance provided program development released time applicants indicated that six chairmen (75%) felt their divisions were participating as actively in 1975-76 as they had in 1972-74. Five (62.5%) chairmen found the same applicants constantly re-applying. Half of the division chairmen (50%, $n=4$) claimed they provided applicants considerable amounts of counseling, while half (50%, $n=4$) felt that their duties were primarily restricted to reading and forwarding applications to the respective dean. Seventy-five percent (75%, $n=7$) of the chairmen had been asked during 1975-76 to comment upon specific applications by the respective dean. The majority of the chairmen (62.5%, $n=5$) had not been directly involved in assisting their faculty recipients write required follow-up reports.

Social Science Division comparisons with total campus program development grants over the last five years has substantiated a trend in over-all decline of division applications.
In 1971-72 the division's total of twelve of the eighty released time units accounted for fifteen percent (15%) of the awarded released time. The following year, 1972-73, the ratio remained constant with twelve out of seventy-six units, or sixteen percent (16%) of the total. Reaching a division peak in 1973-74 with twenty-one units, the division's percentage share increased to eighteen percent (18% of the 114 total units). Although over-all college-wide released time units declined during 1974-75 to eighty-four, the division's total of fifteen still constituted eighteen percent (18% of the total units). Slipping to an all-time low of nine division units released time during 1975-76, the relative percentage dropped dramatically to eight percent (8% of the 108 total units).

Six instructors campus-wide have been granted released time for program development six or more semesters, usually in multiples of three units or more per semester. Three of these six are currently conducting programs which are now funded under institutional released time grants rather than through program development monies. One of the remaining three has been granted released time for ten consecutive semesters to work on course program development innovations. Although a number of faculty have received one four or five semesters, the average recently would seem to be closer to two semesters.

Of the five division members who have been granted program development released time, two have indicated an unwillingness to engage in further grants, at least for the moment. One has temporarily dropped out of grant consideration with an unfinished project, and two are still actively involved.
Discussion

Evaluating the innovative effectiveness of programmed, taped History 27 proved to have inconclusive results because of changing student goals and attitudes over the three year period of the study. Neither "retention" nor "successful performance" percentage rate comparisons resulted in definitive trends concerning the instructional effectiveness of either approach. The instructor of record was not able to recount if percentage rates were more favorable for the Fall, 1972. Lower "retention" and "successful performance" rates have recently been exhibited during Spring Semesters, reflecting an overall campus trend.

Assessing benefits derived by the college from its financial investment in program development released time grants to both history instructors over a ten semester period must be questioned in light of current student preferences for lecture classes. Nevertheless, the initial two year grant to the instructor discussed above did result in recognized advantages from 1973-1974, and residue benefits thereafter. This instructor has continued to supplement his lectures with assignments from the tapes created under the initial grant. Small group discussion, one of the primary goals of the taped approach before 1974, proved to have limited value as the experimental program continued. The instructor has discovered that discussion is just as effectively conducted in the traditional lecture class.

The comparative survey of traditional lecture and PSI AJ 4 teaching methods confirmed both the listed specific purposes and anticipated institutional impacts.

Specifically, sections of PSI AJ 4 evinced significantly lower "retention" due primarily to student confusion over what the new teaching innovation was attempting to accomplish. "Highly successful performance" rates
indicated that significantly more "A" and "B" grades were assigned in
PSI AJ 4 sections than traditional ones, although the more significant
"successful performance" rate in traditional sections was due to more
students successfully completing these courses with at least a "C" grade.

The inference that students in both experimental classes (PSI AJ 4
and programmed, taped History 27) had a higher tolerance for ambiguity, a
greater need for task closure, and more self-motivation was only partially
substantiated. PSI AJ 4 students apparently conformed to this expectation,
while History 27 students did not.

The Social Science Division questionnaire resulted in a lower return
than anticipated for this type of survey. Although the vast majority of
respondents were aware of grant opportunities, as was expected; two-thirds
of them indicated that they had never applied because they lacked informa-
tion, also as anticipated. Despite this fact, only two-fifths responded
that they would apply if more division assistance was provided. While a
large majority (80%) of respondents felt such released time grants were
sound financial investments, considerably fewer (60%) indicated a willing-
ness to use such assistance in methodological innovations. The division re-
pondents overwhelmingly supported program development released time, al-
though a majority hesitated to make use of the grants because they didn't
want to be encumbered or held responsible for results by the administration.
This dilemma, which O'Banion (1974) categorized so dramatically, was high-
lighted by the results of this paper's surveys. Administrative inclinations
to become involved in curriculum have resulted in growing faculty suspicions
of administrative intentions. Declining Social Science involvement would
seem to reflect this apprehension. While this study did not convincingly
affirm the reluctance of the Social Science faculty to engage in learning
theory innovations on their own, it did reflect their potential complacency and hesitation in trying something which could be measurably assessed by the administration.

The questionnaire administered to division chairmen affirmed some anticipated assumptions and pointed out a college-wide ambiguity concerning administrative roles and responsibilities relative to program development grants.

Three-fourths of the division chairmen polled felt that their faculties were just as active in applying for grants in 1975-1976 as they had been during 1972-1974. This assumption was confirmed in the inter-divisional applicant comparisons for the entire survey period. As anticipated by all administrators, recurring applications from the same faculty would reflect problems in half of the divisions. To resolve these expressed problems, the Office of Instruction must take positive steps to alleviate confusion as to goals and objectives of the program. Because half of the chairmen actively recruited and counseled faculty applicants, while the remainder simply forwarded faculty applications, the very essence of faculty voluntarism in this program seemed endangered according to survey results.

Assessing learning theory innovations associated with these program development grants has, to date, been the most neglected administrative function. With three-fourths of the division chairmen now being consulted in an advisory capacity, and with more explicit written summations now required, some progress has been made.

Both the division chairmen and faculty expressed emphatic support for the continuation of the program development grant system at Cerritos. The groups diverged somewhat in assessing alternate possibilities for improving instruction (conferences, classes, in-service workshops, directed study projects, and sabbatical leave grants). The Social Science faculty exhibited
a preference for compensation in attempting instructional innovation through program development grants, while the chairmen were not as convinced that this was the only way to accomplish this goal. The chairmen appeared to be searching for alternate ways of accomplishing this desired end, while the faculty seemed content with the system as constituted. While faculty do make use of the alternative instructional learning processes listed above, they seemed critical of any effort to discontinue such financially rewarding incentives provided by program development grants even if they were not participants themselves.

Conclusions

Since the primary purpose of this study was to investigate Social Science participation in program development grants, the report should conclude with a summation of divisional attitudes.

Divisional responses on both the survey and oral interviews indicated an obvious administrative need to encourage faculty participation from other departments in the grant program. This has also been stressed by the Dean of Academic Affairs.

Will this likely be realized through voluntary participation? Probably not. In interviewing the three senior participants in division released time grants, including the two professors whose AJ and history classes were cited, two contrasting opinions were voiced. Two felt that learning theory benefits were measurable in terms of student performance. The third participant doubted this, and commented that potential instructional benefits were lessened by declining student interest in innovation itself. All three attested that they had profitted from the grants, that they had grown in methodological expertise concerning comparative teaching systems, and had gained greater understanding of learning theory precepts.
Institutional Recommendations

The following recommendations are tendered to the Office of Instruction in order to affect needed policy change in the pursuance of program development released time grants.

Suggested procedural policy for filing applications should include:

1. A proposal that division chairmen host departmental orientations in early March and October where participating grant faculty can answer questions and offer suggestions;

2. A mandatory conference between the grant applicant and division chairman prior to filing in order to tentatively define the parameters of the project. Procedural application requirements (nature of the project, amount of released time and/or funds involved, duration of the study, and anticipated learning outcomes) must be presented. Both the applicant and chairman should then sign the agreement;

3. The submission of the grant proposal by the applicant to the respective dean in the Office of Instruction. If further discussion should be required, both the applicant and division chairman should attend insofar as the chairman has become both the spokesman for the applicant as well as representative of the administration;

4. A signed agreement by the dean accepting the proposed criteria, including the projected length of time, and released units and/or compensation involved. If the grant is to run more than one semester, and many do, semesterly filings can be avoided;

During the working life-cycle of the grant, the participant would:

1. Agree to work at least the mandatory hours contracted per week (eight hours for a three unit grant);

2. Submit a mid-semester report and/or demonstration to both the division
chairman and dean relating to the progress made. Adjustments can be agreed upon at that time;

3. Be required to engage in self-assessment of the completed project's learning theory outcomes within one year after termination of the released time grant;

4. Be encouraged to share findings with other departmental colleagues. Divisional released time units could be made available to former participants to act as program development source-people. Within one year after the completion of any grant (usually in January), the respective dean and division chairman should hold an assessment meeting in order to:

1. Evaluate projected program-development budgetary needs of the division for the upcoming fiscal year;

2. Analyze specific departmental-divisional program development needs, publicity requirements, and post-grant evaluation problems;

3. Investigate new approaches to stimulate faculty involvement through departmental orientations and personal conferences.

Using Smitheran's (1973) four-part criteria for grants (budget resources, faculty motivation, physical plant limitations, and student instructional needs), Cerritos College is encouraged to consider the recommendations listed above, keeping in mind Linker's (Holloway, 1974) comment that all grants should reflect institutional goals.
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Appendix "A"

April 6, 1976

TO: DIVISION CHAIRMEN, CERRITOS COLLEGE

FROM: KEITH HINRICHSEN, SOCIAL SCIENCES

RE: PROGRAM DEVELOPMENT RELEASED TIME

I am in the process of evaluating my division's response to program development released time grants. Working in conjunction with both my doctoral program advisors and the Office of Instruction, I would appreciate your taking a few minutes from your busy schedule to share with me, anonymously, of course, your impressions concerning your administrative involvement with these grants. Needless to say, your confidences will be respected, and your opinions will be of great assistance in writing my position paper.

Thanks,

Keith Hinrichsen

Note: All eight division chairmen with supervisory class-room responsibilities responded.

1) Do you feel your division is participating as actively today as they did in 1972-74 in requesting program development released time? 
   - YES 6 75%
   - NO 2 25%

2) Have you found the same individuals tend to apply each semester? 
   - YES 5 62.5%
   - NO 3 37.5%

3) Have you actively participated (over 50%) in counseling the applicants? 
   - YES 4 50%
   - NO 4 50%

4) Are your administrative responsibilities primarily limited to reading, signing and forwarding the requests? 
   - YES 4 50%
   - NO 4 50%

5) Have you been asked by the respective dean to comment upon the projects for any recipient? 
   - YES 6 75%
   - NO 2 25%

6) Have you been involved in helping recipients write their follow-up reports? 
   - YES 3 37.5%
   - NO 5 62.5%

QUESTIONS # 7 and # 8 OPTIONAL

7) Have you discovered any techniques which you feel are effective in encouraging certain staff members to undertake these grants? 
   1. Participants present findings in meetings.
   2. Announce availability--it's up to staff to act.
   3. Discuss needs with division-worthy projects encouraged.
   4. Leadership is provided to encourage teacher to develop potential (80% do).
   5. Enhance teacher competency through study.

8) Have you found other incentives or approaches which are better suited to encouraging the faculty to engage in instructional innovations? 
   1. Only to encourage everyone to do something
   2. Suggestions from this study welcomed.
   3. No; I have not found anything to be more effective.
   4. Despite blind allies and mistakes, the need for research and innovation is great. Two thirds of applicants profit, and Cerritos needs a co-ordinator.
Appendix "B"  
April 7, 1976

TO: SOCIAL SCIENCE FULL-TIME FACULTY
FROM: HINRICHSN

I recently began an investigation of program development released time for the improvement of instruction. A major goal of the study was to ascertain if fewer division colleagues were applying relative to college requests, and if so, why this trend was occurring.

During instructional years 1971-72 and 1972-73, 15 percent of the college applicants were from the Social Sciences. This percentage increased slightly to 18 percent for both 1973-74 and 1974-75, but declined significantly to only 8 percent this year (1975-76). We had 21 units released in 1973-74, and only 9 this year.

I would appreciate your answers to the following questions, anonymously of course. If you wish to append additional comments, please do so in question #8.

(15/22 responded, 68%)

1) Are you aware program development released time units are available? 
   YES 13 67%
   NO 2 13%
   ($32,000 has been set aside for 1975-76)

2) Have you ever applied for these grants? 
   YES 5 33%
   NO 10 67%

3) If you have once been a recipient of a grant, would you consider re-applying in the future? 
   YES 7 47%
   N/A 2 10%
   NO 1 6%

4) Do you feel more publicity or information should be given concerning these grants? 
   YES 10 67%
   N/A 1 6%
   NO 4 27%

5) Would you consider applying if more assistance was provided by the division chairman? 
   YES 6 40%
   N/A 3 20%
   NO 3 20%

6) Do you feel these grants are financially sound ways to improve instructional approaches? 
   YES 12 80%
   N/A 2 13%
   NO 1 8%

7) Would you prefer to develop new instructional approaches without the obligations of school released time assistance? 
   YES 2 13%
   N/A 4 27%
   NO 9 66%

8) ADDITIONAL COMMENTS

New innovative approaches are rarely found to be better than traditional ones. Consideration should be given to minor instructional innovations in courses.

The program is good as is, don't change it.

I am interested and would like more information.

I prefer to innovate on my own, for the administration usually associates innovation with learning software. More attention should be given to supplemental materials, like workbooks, for courses.
### Table 2

Comparison of Successful (A-C) and Unsuccessful Performance (E and W) between PSI and TL AJ 4 Students as a Comparison of Academic Achievement (Retention Rate) (Attrition Rate)

<table>
<thead>
<tr>
<th></th>
<th>Successful</th>
<th>Unsuccessful</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL AJ 4</td>
<td>77.8% (84)</td>
<td>22.2% (24)</td>
</tr>
<tr>
<td>PSI AJ 4</td>
<td>61.7% (50)</td>
<td>38.3% (31)</td>
</tr>
<tr>
<td>Difference</td>
<td>16.1%*</td>
<td>16.1%*</td>
</tr>
</tbody>
</table>

* Significant beyond the .05 level of confidence.

The comparison of expected and observed frequencies for successful grades (A-C) indicated no significance at the .05 level (p > .05) within the TL AJ 4 approach when compared to the total number of grades (A-C) given; but did result in significant findings (p < .05) for grades A and C in the PSI approach when compared to the expected frequencies of successful grades given. The Chi Square findings with a df 1 resulted in significance at the .001 level of confidence for grades A and C (See Table 2) (Refer to Table 3).

### Table 3

Comparison of Final Grades between PSI and TL AJ 4 Students as a Function of Categories of Academic Achievement.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>W</th>
<th>E</th>
<th>T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL AJ 4</td>
<td>22.2% (24)</td>
<td>25.0% (27)</td>
<td>30.6% (33)</td>
<td>14.8% (16)</td>
<td>7.4% (8)</td>
<td>108</td>
</tr>
<tr>
<td>PSI AJ 4</td>
<td>42.0% (34)</td>
<td>17.3% (14)</td>
<td>2.5% (2)</td>
<td>37.0% (30)</td>
<td>1.2% (1)</td>
<td>81</td>
</tr>
<tr>
<td>Difference</td>
<td>19.8%*</td>
<td>7.7%</td>
<td>28.1%*</td>
<td>22.2%*</td>
<td>6.2%</td>
<td></td>
</tr>
</tbody>
</table>

* Significant beyond the .05 level of confidence.