This document describes a three-part, flexible, individualized teacher education program which spans the preservice/inservice continuum. The first part, Secondary Teacher Education Program (STEP), is a five-phase program which features early and continuous contact with secondary school classrooms and students, individual learning packages called SEEDPACS, continuous assessment and monitoring, and a variety of teaching/learning methods including small-group activities, seminars, simulations, microteaching, and independent study. The second part of the program is a new Master of Education degree program that deals specifically with the continuing education needs of practicing teachers and the inservice needs of school districts. Credit is earned by performance, and no core of courses is required of all students. The third part is a new approach to summer school for teachers called Academic Fair. All courses offered by the Department of Secondary Education, University of Minnesota are available under 10 program categories. The course scheduling includes independent study, small groups, and other variations dictated by the needs of the students. More specific information regarding STEP and a program satisfaction questionnaire are appended. (PD)
A DESCRIPTION OF
A
FLEXIBLE, INDIVIDUALIZED
PRE-SERVICE, IN-SERVICE
TEACHER EDUCATION PROGRAM

Submitted to
ERIC Clearinghouse on Teacher Education
AACTE

by
Valworth R. Plumb, Professor
Leonard N. Ojala, Assistant Professor

Department of Secondary Education
University of Minnesota, Duluth
Part One

Summary

A three-part, flexible, individualized teacher-education program which spans the pre-service, in-service continuum has been developed and implemented. The program was designed with the co-operation of the public and private elementary and secondary schools in northeastern Minnesota. The program is a "do-it-yourself" effort which received no outside funding and is proof that teacher education institutions need not rely on massive foundation or federal funding in order to fundamentally improve programs.

The first part of the total program is the Secondary Teacher Education Program (STEP) which replaced a traditional teacher-education program in September, 1972. STEP is a five-phase competency-based, individualized program which features early and continuous contact with secondary school classrooms and students, individual learning packages called SEEDPACS, continuous assessment and monitoring, and a variety of teaching-learning methods--including small-group activities, seminars, simulations, micro-teaching, and independent study, in addition to some large-group presentations.

The second part of the program is a new Master of Education Degree which deals specifically with the continuing-education needs of practicing teachers and the in-service needs of school districts. It too is an individualized program in which credit is earned by performance, not by time served. No core of courses is required of all students, and the program can include workshops, directed study, credit packages, and activities at the local school level as well as activities on the campus.

The third part provides a new approach to summer-school offerings for teachers in a programs approach called an "Academic Fair". All courses offered
by the Department of Secondary Education are available for summer-school students under ten program categories. The usual method of scheduling courses to meet every day for a certain period of time was discarded in favor of scheduling which is truly flexible: independent study, small groups, meetings scheduled once or twice a week, classes that meet all day, classes that never meet, and all variations which may be dictated by the needs of the individual students.

The summer program substantially increased enrollment over the previous summer's program, and an evaluation indicated a high degree of student satisfaction.
A Three-Part, Flexible, Individualized Teacher-Education Program

The University of Minnesota, Duluth has demonstrated that it isn't necessary to depend on large grants of money in order to develop and implement innovations in pre-service and in-service teacher-education programs. Since the fall of 1972, three major programs have been implemented by the do-it-yourselfers at UMD: (1) a new competency-based Secondary Teacher Education Program (STEP), (2) a new Master of Education Degree, and (3) a unique summer school program for in-service teachers. All three of the programs were developed with no outside funding. All that is required is a faculty committed to improvement in teacher education and substantial amounts of blood, sweat, and tears. Let us examine the characteristics of each of the new programs.

STEP Development and Implementation

The Secondary Teacher Education Program was but a gleam in the eyes of the Department of Secondary Education in 1970. After contributing to, and listening to, years of critical comment concerning teacher-education programs in general—and the traditional type of program then in operation at UMD in particular—members of the Department decided in the fall of 1970 that the time had come to examine seriously our program as it existed and to begin the work of developing an improved program.

In order to collect information from a large number of people in an efficient manner, the Delphi Technique was used. Questionnaires were mailed to 1100 school administrators, in-service teachers, pre-service teachers, high school students, and lay people in order to determine what skills, understandings, and competencies were deemed essential in effective teachers. The information on the questionnaires was categorized, refined, and returned to the senders along with a request to rank the identified competencies on the basis of "essential," "desirable," or "not necessary." These data were again refined, and by the spring of 1971,
we had developed a list of competencies for a new program.

In addition to holding a commitment to a competency-based program, the members of the Department were firmly convinced that drastic changes had to be made in the teaching-learning methods employed in the teacher-education program. For years we had lectured about individual learning styles, individual differences, the necessity to provide a variety of learning activities, and the necessity to "let each student progress at his own rate." However, the example which we provided was the old, traditional, lecture, large-group, "tell-'em-and-test-'em" model. There was little attempt made to relate theory to practice; and in addition, the sequence of courses in the traditional program was suspect. Pre-service teachers in the old program were being taught the usual learning theories, human-growth-and-development patterns, and history and philosophies of education a full year before they were allowed to work with secondary students in junior and senior high schools. In effect we were saying, "Learn this stuff because when you get into that classroom you have to know this." We were telling students that there was a need to learn certain skills, concepts and understandings that they could not relate to any reality based on experience.

We were convinced that our new program had to bring theory and practice closer together. There was almost unanimous agreement, based on the hundreds of questionnaires received, that an improved teacher-education program must have provision in it for early and continuous involvement with students in junior and senior high schools.

During the summer of 1971, members of the Department began the development of the new model, based on the data gathered during the 1970-71 academic year. University students participated on committees in this development and they earned course credit for their contributions. We realized that without the pressure of a deadline for implementation, the development of the model could take years. Accordingly, we set September 1972 as the date that the new program would go into effect. The deadline was met, and STEP was implemented in September.
1972. Students who had entered teacher education under the old program were phased into the appropriate places in the new program. During the current academic year, almost all of our students are in the new program.

We are convinced that certification of teachers based on a series of courses and credits no longer is the best preparation of teachers who will be expected to function in a rapidly changing profession. The ability to perform certain specified behaviors at a criterion level is a more rational basis for recommending candidates for certification.

The model which was developed and implemented in September 1972 has continuous feedback opportunities in it and this feedback has resulted in revisions and changes in the implementation of the model.

A comparison of the STEP program with a traditional program is offered as a graphic illustration of the differences.

**Comparison of Traditional Program with Step Program**

**Traditional Program**

1. Student teaching is the only contact prospective teachers have with pupils in secondary schools, and this comes at the end of the program.

2. All students take the same sequence of courses regardless of ability or experience.

3. Screening for admission occurs at the time a student applies for student teaching.

4. The approach is cognitive and theoretical; students have no experience basis to understand or apply theory.

5. No systematic assessment is made of strengths, weaknesses, attitudes, values or goals of the student.

**STEP Program**

1. Students become involved with secondary pupils to varying degrees in each phase of the program. Interaction is more frequent over a longer period of time.

2. Each student's program is tailor-made to his goals, measured aptitudes and existing performance level.

3. Screening for admission is at the time a student applies to the program in secondary education, usually at the beginning of the junior year.

4. Theory is related to classroom experiences with learners that students are having at the time. Affective factors in learning are emphasized.

5. Assessment of strengths, weaknesses, attitudes, values and goals made at time of admission and reassessment made throughout the program.
6. Advisement is on a hit-or-miss basis.

7. Student performance is almost solely verbal; little is known about skills and specific teaching behaviors until the student teaching experience.

8. Faculty members have had little opportunity to know students in depth.

9. Lecturing to large groups is the primary method of instruction.

10. If unsuited for teaching, students cannot learn of their inability to work with secondary students until a heavy commitment of time and money and credits has been made.

11. Students can complete the program with little personal commitment to teaching as a career.

12. The program cannot meet the new State Department certification requirements for teachers with respect to human relations.

13. Little provision is made for the coordination of some of the methods courses with the rest of the program.

Program Operation

As a basis for the development of this program, we identified a set of understandings, skills, and behaviors that should be the goals of the program. Specific behavioral objectives associated with these goals were developed for each phase of the program. The identification of the desired terminal behaviors enabled us to establish the experience sequences, determine behaviors prerequisite to other higher level behaviors, and to make realistic assessment of abilities.¹

1. See Appendix A for a concise "systems" presentation of the operation of the program.
Who Am I?  Can I Be A Teacher?

Do I Still Want To Be A Teacher?

Application and Admission to STEP

PHASE II 7 CREDITS

CLINICAL EXPERIENCE

Studying Adolescents
Learning About Learning
Improving Human Relations Skills
Beginning To Put Theory Into Practice In Classrooms

Teacher aide  Tutoring

Still Interested?

PHASE III 7 CREDITS

TEACHING LABORATORY

Developing Teaching Competencies
Planning  Selecting Materials
Classroom Skills  Strategies
Using Media  Evaluation

Interpersonal Relations
Drug Education
Microteaching

PHASE IV 10 CREDITS

PRACTICUM

Putting Skills To Work In The Classroom
Teaching
Self Evaluation
Planning
Team Efforts
Using Subject Matter Competency
Practicing Good Human Relations

Ready to Take Charge?

PHASE V 4 CREDITS

CLOSURE EXPERIENCES

Finding A Job
Certification Requirements
School Law For the Teacher
Teacher Relations
with students
with other teachers
with the community, etc.
Controversial Issues
Exploring Special Interests
Professional Organizations

Yes

Request for Information

Please send more information about STEP to:

NAME

(Please Print or Type)

ADDRESS

CITY  STATE  ZIP

I am:  A school administrator □  A secondary teacher □  A student □
FEATURES

EARLY ENTRY.....Begin Phase I as early as the second quarter of the Sophomore year.

INDIVIDUALLY DESIGNED ....The student's program will be designed to meet his personal needs and goals.

PERSONALIZED INSTRUCTION.....Small group instruction and independent study will be emphasized.

COMPETENCY BASED.....Progress through the program will be dependent upon acquiring the needed competencies and not upon the accumulation of credit hours.

HUMAN RELATIONS COMPONENT.....The human relations component is designed to meet the new Minnesota certification requirements.

PERFORMANCE MONITORED ....The student's performance will be continually monitored by the student himself and by his advisory committee.

STEP Director
Department of Secondary Education
University of Minnesota, Duluth
Duluth, Minnesota 55812
The program contains a number of major innovations or deviations from past practice. These are characteristic for the program as a whole and are common to all phases. A course is considered to have been successfully completed and credits are granted when a student is able to perform to a criterion level those behaviors prescribed as outcomes for the course. Individual students vary in the time it takes them to reach the required standards. Instead of time being a constant and performance being distributed, mastery of a skill or performance level is constant and the time to reach the standard is the variable.

A student's individual study program is organized around the work he does on a set of individual learning packages called SEEDPACS (SEcondary EDucation PACkets), some of which are required of all students and others which are chosen by the student. These SEEDPACS have the following components:

- a list of major concepts to be developed
- a set of inquiries to be explored as direction to the student's study
- a pre-test
- a set of behavioral objectives that spell out how the student must perform at the end of his learning experience
- descriptions of activities such as readings, papers to be written, involvements with various media, lectures to be attended, seminars in which to participate, and activities related to community groups
- a self evaluation
- a final test of proficiency

Some SEEDPACS are independent of other SEEDPACS and others are prerequisite to the study of more advanced units. In some areas of concentration, a student is required to meet predetermined standards of proficiency in the stated outcomes of each SEEDPAC before he can begin to work on the next.2

Small groups are used in many ways. Probably the most important kind of group is the "growth group." A student is assigned to one of these groups consisting of 15-20 students and a faculty member at the time he is admitted to the program. The student is a member of this group until he completes the program. Composition of the groups changes slowly since changes occur only as persons leave upon completion of the program or enter as they begin the program.

2. Samples of SEEDPACS are included in Appendix A.
In the growth groups, stress is on the affective and humanistic development of the prospective teacher. Topics for study and discussion include individual teaching goals, philosophy, attitudes toward students, reactions to observed behaviors of teachers and students, personality development, and the like. Other groups are formed from students with the same major, for the investigation of particular problems, for research activities and for more effective study of difficult concepts.

Two new State Department certification requirements related to drug information and human relations education are met through the study of specially designed SEEDPACS and other activities in each phase. This results in a continuous development in these areas.

Students interested in secondary teaching at UMD take Phase I of STEP for 2 credits during the second or third quarter of the sophomore year. In this phase, an orientation to teaching, 15 hours of structured observation in secondary classrooms give students a chance to look at a number of teacher workdays. Students study teaching as a career, including placement opportunities, salaries, and professional-growth opportunities. Students are expected to get a better feel for whether or not they wish to commit time and energy to continued work in teacher education. They are encouraged to take a good hard look at the demands of the profession in terms of their own goals, abilities and shortcomings. An interview with a member of this department is the terminal activity of this phase.

Phase II is a 7-credit block in which students combine 6 hours per week working in a junior-high-school or high-school classroom as a teacher's helper, tutor, and/or small group facilitator along with more formal study of adolescent development, learning and other theoretical material. This gives students an opportunity to reconcile theory with the ideas they gain from their own observation of, and experience with, adolescent learners.
Phase III is another 7-credit block in which students learn the skills and competencies associated with planning for instruction, performing as a teacher, and evaluating the results of instruction. Emphasis is on the practical: determining goals for instruction, stating objectives, choosing instructional materials and strategies, acquiring skills in questioning, making oral presentations, using audio-visual materials, using small-group techniques and measuring student performance. Some of the means are the use of videotape to record performance, micro-teaching sessions and special seminars with methods persons in the major area. On occasion students have the opportunity to try out a unit, an inquiry technique or some other short-term lesson with a group of secondary pupils, but most practice work is done with other STEP students acting as "pupils." After students develop the set of competencies we feel necessary to do a good job in the classroom, they are considered to have completed Phase III.

Phase IV is a 14-credit practicum during which STEP students assume full responsibility for instruction of a group of secondary students for a full quarter, preferably with another STEP student as a partner. They are assigned to a certified secondary teacher for a full day of teaching in the major area. Wherever possible we engage students in this activity in pairs so that they can help each other, evaluate each other's performances and learn to work as part of a team. In this phase they are expected to put into play the skills developed in Phase III, to practice good interpersonal relations and learn more about themselves as future teachers.

Phase V, four credits, is designed to help students prepare to enter the profession. Job placement, certification, tenure, salaries, legal responsibilities of teachers, professional organizations, and innovations in education are among the topics studied. Students also can take an initial look at related occupations in administration, counseling, special education and the like if
they choose. Students can register for Phase V concurrently with Phase IV to provide a "professional" quarter.

In all phases, students are expected to demonstrate a high degree of ability to direct their own learning efforts, establish their own priorities for commitment of time and study effort, and begin to become more independent learners and decision makers. Students who are highly dependent on extrinsic motivation find some difficulty in meeting the demands of the program. Individual study packages and recommended readings have replaced required textbooks. Small-group seminars and a large number of individual conferences have replaced large group lectures. A combination of essay and oral examinations is used instead of objective tests. Phases are considered to be completed when the student can perform certain tasks in an acceptable way. Since achievement is based on mastery rather than on comparisons of student performance, the grading is P-N.

STEP requires commitment to teaching on the part of students. It places great demands on students in terms of effort and self discipline. Students who complete STEP should be sure of themselves and their competencies, self-directed in their learning and capable of making the role changes that continuing modifications in education will require.

MASTER OF EDUCATION DEGREE

The second part of the change in teacher education at the University of Minnesota, Duluth addresses itself to the needs of teachers in the field. It was becoming increasingly evident that the traditional graduate school programs offered at UMD were not meeting the needs of many of our in-service teachers. The traditional paternal model was followed: the educational institution was telling students (in this case experienced teachers) what they should study in a graduate program. The teaching-learning model was primarily lecture, and the activities were almost exclusively college courses. In a time when educators
are talking more and more about letting students make decisions about what they are going to study and when, it seemed ironic that graduate school programs in education were still prescribing most of the areas of study for practicing teachers. It was another case of "Don't do as I do--do as I say."

Admission to the existing Master of Arts program offered by the Graduate School of the University of Minnesota is determined primarily by the candidate's undergraduate G.P.A. An overall G.P.A. of 2.80 appears to be the minimum that is accepted. An analysis of UMD graduates in the period 1965-69 revealed that on the basis of undergraduate G.P.A., 65% of the UMD graduates of this period who were certified to teach in elementary or secondary schools would not be admitted to the M.A. Degree program of the Graduate School should they apply. It was clear that the M.A. Degree program could not serve the continuing educational needs of two-thirds of the practicing teachers in the area simply because of the admission requirement of the Graduate School.

At about this same time, increasing demands by public school educators in the state of Minnesota for more voice in determining the scope and methods of their in-service education led to the adoption of a continuing education regulation by the Department of Education of the State of Minnesota. Briefly, this regulation stipulates that life certificates will no longer be issued, and that educators must earn 120 renewal units during each five-year period of certificate renewal. Renewal units may be granted for college or university work, activities in the local school district, travel, committee work, and a variety of other activities. The local school district continuing-education committee (made up of teachers, administrators and board members) makes decisions concerning renewal units.

These two developments--the increasing concern about the inadequacy of traditional graduate-school programs for in-service teachers, and the adoption of the continuing-education regulation which involved members of the education
profession in decisions concerning their in-service education--resulted in the development and implementation at UMD of a new professional graduate degree program for teachers. The Master of Education degree features programs that are individually tailored to the students' professional goals and needs. Credit is earned by performance, not by time served. No "core" of courses is required of all students, nor is a major thesis required. In addition to college courses in academic areas and in education, the individual programs can include: workshops, short courses, directed study, in-service work with colleagues, credit packages for classroom experimentation and innovation, curriculum development activities, production of instructional materials--or any activity which the student and his advisors decide will help the student achieve his goals and objectives.

In the Master of Education Degree Program at UMD, each degree candidate plans his individual degree program in consultation with a committee of faculty members. This degree program is designed to meet the professional needs and goals of the student as they are clarified in the consultation process. Teachers are encouraged to develop a minimal level of competence in areas that are thought to characterize a master teacher.

Admission to the program is based on a number of criteria. Past scholastic achievement, as represented by the undergraduate grade point average and previous graduate level work, is considered. A test of scholastic aptitude is required. The candidate's potential for using the results of post-baccalaureate study to exert leadership in instructional improvement is evaluated by immediate supervisors, colleagues and program faculty members. The extent to which the candidate has profited from experience and other non-formal learning is evaluated by supervisors and colleagues. Weakness in any one of these areas can be compensated for by strengths in the others.

Once admitted, a candidate must prepare a well defined, explicitly stated statement of goals and objectives for his graduate study. In consultation with
his faculty committee, these are measured against his level of knowledge and competence in the areas of curriculum, instructional methodology, classroom sociology, educational psychology, and the content in his teaching specialty.

His program is then planned to meet his identified needs and goals.

The advisement committee is appointed to help the student achieve his program objectives. The work equivalent of 45 credits is needed for the degree, but flexibility is provided in the way credit is awarded. In most cases, credit is given for specific achievement, not for attendance in classes for a given time. It is the responsibility of the advisement committee to guide the student, monitor his progress and decide when the student should be awarded the degree.

There is no residence requirement. Students can be registered to receive credit for work being done principally in the teaching situation. Much of the work that must be done on the campus is done through the medium of summer courses, late afternoon, evening and Saturday classes. Off-campus classes, seminars, and individual conferences are arranged as needed.

Since credit and progress is based on the attainment of specific objectives and the ability to demonstrate particular competence, minimal standards are necessarily higher than the usual requirements for "passing" a course.

This program is designed to blend with in-service needs for both teachers and local school districts. Teachers and administrators are exploring ways by which the resources of the program can be used to meet both kinds of needs.

The Master of Education Degree program began on July 1, 1973 and as of November 1, 1973, there have been 100 applications for admission. There are presently 75 graduate students in the program.

SUMMER-SCHOOL PROGRAM

Closely inter-related to both the pre-service STEP program and the in-service Master of Education degree program is the new approach to summer school implemented by the UMD Department of Secondary Education. The Department was given permission
to experiment with a programs approach to summer course offerings during the summer of 1973. The program was titled "An Academic Fair" and stressed flexibility and openness. All courses listed by the Department were offered. Faculty members worked with students individually in selecting learning experiences which would meet their needs and assist them in arriving at their goals. Some of the activities were traditional and scheduled; others were non-traditional and scheduled; and still others were non-traditional and unscheduled. Students had the opportunity to concentrate their efforts in one area or in several; they could enroll primarily in some other department at UMD or some other college or university and spend a part of the time with the Department of Secondary Education. A total of ten areas of concentration or programs were offered with a staff member in charge of each area. Students registered and received credit through the existing framework of courses, registration, and enrollment procedures. The budget for the program was comparable to the budget for the Department for the previous summer.

Program areas offered were as follows:

1. New Classroom Procedures and Materials
2. Human Relations
3. Driver Education
4. Technology in the Classroom
5. Individualizing Instruction
6. Drug Education
7. Educational Administration
8. Community Schools
9. Computers in Education
10. STEP (Phases III, IV)

The Measurement Services Center of the University of Minnesota conducted an evaluation of the "Academic Fair." There were 316 graduate students enrolled
and responses were received from 63%. The summary of the Program Satisfaction Questionnaire indicated a high percentage of "Satisfied," "Somewhat satisfied," and "Very satisfied" responses to all 49 items.³

Most faculty members agreed that their work loads were heavier than in a typical summer session; that students seemed as motivated or more motivated (none indicated less motivated), that students generally seemed to have positive feelings about the program, and that the program's approach should be continued. The Department has taken official action recently to offer the program's approach again during the 1974 summer session.

Greater flexibility in tailoring summer school programs to meet individual student needs has not only met with the approval of students and faculty, but has attracted the attention of University administrators and other departments. The Academic Fair offered by the Department of Secondary Education reversed a downward trend in summer school enrollments. At a time when the other seven departments in the Division of Education and Psychology suffered deficits of from $1300 to over $9,300 during the summer of 1973, the Department of Secondary Education was attracting students in such numbers as to show a profit of over $7,100. Admittedly, the University is not a profit-making organization, but the figures do reflect enrollments and suggest that the downward trend in summer school enrollments and subsequent increased financial drain on the University can be reversed by offering innovative and quality programs.

These then are the three components of a total, flexible, individualized, competency-based approach to pre-service and in-service teacher education at the University of Minnesota, Duluth. At a time when research and development funds for education are scarce, we feel that it is especially important to demonstrate that substantial improvements can be made in teacher-education programs without depending upon a massive infusion of federal or foundation funds.

3. The results of this questionnaire are given in full in Appendix C.
funding. It can also be done by commitment to improvement, and a willingness on the part of public-school educators and university professors to devote much time and energy in a co-operative effort to develop and implement programs that are designed to better meet the professional needs of educators in a rapidly changing profession and society. The development and implementation of these programs at the University of Minnesota, Duluth are proof that you can really "do it yourself."

Note: As indicated earlier, these three phases of our enterprise were described in November 1973. To bring matters up to date briefly, all three phases are doing well.

**STEP** is undergoing steady change, as we see need for minor adjustments.

The MEd program now has a better environment for growth, with new quarters for the Director, secretarial help, etc. The number of students enrolled as of this date is 160. The first recipients of the degree, 9 people, finished their work in the summer of 1974. Feedback is favorable.

The 1974 summer program continued in the pattern of an "Academic Fair"; but, fortunately, more faculty time was made available to us. The net result was that the program just about "broke even" in a financial sense -- and that the pressure on the faculty members was less severe. An evaluation of the 1974 "Academic Fair" again indicated high student satisfaction.
APPENDIX A
PHASE I 2 CREDITS
ORIENTATION
Observing Classrooms
Looking At Teaching
As A Career
Who Am I? Can I Be A Teacher?

Do I Still Want To Be A Teacher?

PHASE II 7 CREDITS
CLINICAL EXPERIENCE
Studying Adolescents
Learning About Learning
Improving Human Relations Skills
Beginning To Put Theory Into Practice In Classrooms
Teacher aide Tutoring

Still Interested?

PHASE III 7 CREDITS
TEACHING LABORATORY
Developing Teaching Competencies
Planning Selecting Materials Strategies Evaluation
Classroom Skills Interpersonal Relations
Using Media Drug Education
Microteaching

Ready to Take Charge?

PHASE IV 10 CREDITS
PRACTICUM
Putting Skills To Work In The Classroom Teaching Planning
Self Evaluation Team Efforts
Using Subject Matter Competency Practicing Good Human Relations

Want to Take Charge?

PHASE V 4 CREDITS
CLOSURE EXPERIENCES
Finding A Job Certification Requirements
School Law For the Teacher
Teacher Relations with students with other teachers with the community, etc.
Controversial Issues Exploring Special Interests Professional Organizations

REQUEST FOR INFORMATION

Please send more information about STEP to:

NAME ____________________________ (Please Print or Type)

ADDRESS ____________________________________________________________

CITY ___________________ STATE ___________ ZIP ________
FEATURES

EARLY ENTRY.....Begin Phase I as early as the second quarter of the Sophomore year.

INDIVIDUALLY DESIGNED.....The student's program will be designed to meet his personal needs and goals.

PERSONALIZED INSTRUCTION.....Small group instruction and independent study will be emphasized.

COMPETENCY BASED.....Progress through the program will be dependent upon acquiring the needed competencies and not upon the accumulation of credit hours.

HUMAN RELATIONS COMPONENT.....The human relations component is designed to meet the new Minnesota certification requirements.

PERFORMANCE MONITORED .....The student's performance will be continually monitored by the student himself and by his advisory committee.
**STEP IN A CAPSULE**

**Sold 1-201 STEP Phase I (2 cr)**

Students work on 2 SELEFACS dealing with teaching as a career and why they want to be and think they will be a good teacher. Topics include salaries, the job market, personal strengths and weaknesses, etc. Students spend 15 hours of structured class-room observation learning what tasks teachers must perform, the demands of the teacher, how kids behave, etc. This course is usually taken during the sophomore year.

**Sold 3-101 STEP Phase II (7 cr)**

Students begin to reconcile theory with practice by combining classroom experience with campus based programs. They work on SELEFACS and meet in small groups to deal with models of teaching, learning, classroom sociology and adolescence. They also become involved in special programs in human relations and in drug information. They are assigned to schools for approximately 6 hours/week as a combination tutor-teacher aide-observer. They are encouraged to work one-to-one and with small groups of students. They are asked to try to figure out what adolescents are like, what concerns them, what values they have, and how they are developing intellectually, socially, physiologically, and emotionally. This is typically the first course taken in the junior year.

**Sold 3-201 STEP Phase III (3-10 cr)**

This course is an instructional laboratory period where students learn and practice skills associated with teaching. Students become involved in planning for instruction, defining goals and objectives, evaluating instructional materials, and evaluating outcomes of instruction and instructional strategies. They have microteaching sessions in which they practice set induction or interest arousal, reinforcement techniques, questioning, communication skills, etc. They learn to use all kinds of AV and other equipment. They are asked to write objectives, give demonstration lessons, write test items, write complete units, daily lesson plans, describe strategies to be used for particular purposes, etc. There is continued involvement in interpersonal and human relations and drug education. The single major student registers for 7 credits, students with double majors or strong minors may take extra work and register for extra credit.

**Sold 3-301 STEP Phase IV (10-17 cr)**

Phase IV is much like student teaching. Students are assigned full-time to a public or private secondary school. They try out a variety of methods and techniques and begin to develop a personal style. The directing teacher is the principal mentor and monitor. Students should learn to expect full responsibility for a particular segment of instruction. Students often work in pairs wherever possible so they can learn to work on a team and give each other feedback, video-tape each other, etc. The typical student is assigned 14 credits but longer experiences can be given extra credit.

**Sold 3-401 STEP Phase V (4 cr)**

This is the final step in getting ready to enter the profession. A student becomes involved in topics such as writing letters of application, certification, contracts, salary schedules, teachers organizations, legal issues, self evaluations as a teacher, organization of schools, what decisions are made where, recent developments, e.g. nod scheduling, etc. There is no direct involvement in the schools on the part of students. This experience can be taken concurrently with Phase IV but usually follows the student teaching experience.
The

Secondary
Teacher Education Program

For Those Thinking of Teaching in Secondary Schools

Department of Secondary Education
Division of Education & Psychology
University of Minnesota, Duluth

1-24-73
INTRODUCTION

Persons who wish to teach in the tax-supported schools of the State of Minnesota must obtain a certificate from the State. This system attempts to assure that certain minimum standards of professional competence are met by those entrusted with the education of our greatest natural resources: the children and youth of the State. To this end, the State of Minnesota accredits the programs established by colleges in Minnesota that incorporate the features the State feels necessary for satisfactory teacher education, and it grants certification to those graduates whom the accredited colleges recommend. U.D. is one of these institutions, and it recommends those students for certification who successfully complete the program described in this handbook.

To qualify for a teaching certificate, each U.D. graduate must have completed a program of study in a major field or in a combination of major and minor fields which meets the requirements set by the State. In addition, he must complete the professional education program established by the Department of Secondary Education at U.D.

To avoid problems of admission to the professional-education program of the Secondary Education Department, the prospective secondary teacher should observe the following timetable as closely as possible:

Freshman Year:
1. Take progress toward meeting liberal-education requirements for a degree.
2. Begin work on major area.
3. Take the reading-placement test and initiate remedial program if needed.
4. Make contact with the Department of Speech Pathology/Audiology for speech clearance.

Sophomore Year:
1. Continue progress toward meeting the liberal-education requirements for a degree.
2. Continue progress in major program or in major-minor program.
3. If you have not taken the reading-placement test or obtained speech clearance do so now. (See 3 & 4 above)
4. Register for Phase I.
5. Take plans to submit Upper-Division papers.
6. Complete Phase I.

THE PROGRAM

U.D.'s teacher-education program is a major departure from the conventional program. Students will be recommended for certification on the basis of their ability to perform certain behaviors thought to be typical of good and effective teachers rather than because of their endurance in a sequence of credit courses. Each student is given an opportunity to progress at his own pace and, once a minimum set of necessary behaviors has been acquired, to pursue a program tailored to his own interests and special aptitudes. The practice of instructing classes as though students are all identical in achievement, readiness, and needs has been discarded in favor of an individualized program in which students have opportunity to assume much greater personal responsibility for their own study and learning. Opportunities are provided for experience with various media and to be judged by a variety of evaluation techniques including self-evaluation. Attention is paid to interpersonal relationship development and to
a critical self-examination of values, commitments, and aspirations in teaching. Frequent interaction with secondary-school students is provided.

Independent study, group seminars, lectures, and team teaching, as well as other simulation experiences, are all utilized to allow for more opportunity for the student to practice specific skills, to frequently evaluate his own goals, development, strengths, and weaknesses and to learn from his peers as well as from his college instructors. Participation in a small, personal-communication growth group gives opportunity for practice of good interpersonal relations, development of better self-awareness and feeling for the differences between and among individuals and various groups of persons.

There are five major phases to the program. After informing himself of the requirements of the program, the candidate enters the Orientation phase by registering for Phase I. Here a real attempt is made to give him the opportunity to judge himself in relation to the demands of the profession. After completion of Phase I, a panel of faculty members will help the candidate evaluate his awareness of factors important to his choice of teaching as a career, his commitment to teaching, his goals and objectives in the field, and his learning needs--as well as his existing competencies in his major area and in professional behaviors. If the student is admitted, his program is then planned, an adviser is appointed, and the candidate is assigned to a growth group.

The second phase is an Introduction to secondary schools and to secondary-school students and their learning. Theory of learning and instruction are interwoven with classroom experience as an aide, tutor, etc., to establish a foundation for the development of a personal theory of teaching. Seminars, study, and discussion with faculty and other students enable the candidate to use experience with and observation of adolescents as they engage in learning, to effectively interpret theories of learning and instruction. Here, too, the candidate is offered a chance to evaluate his goals, his abilities, and his needs in a realistic setting before he has made a heavy commitment of time and effort toward preparing to be a teacher.

In the third, or Laboratory, phase of the program, the emphasis is on the development of specific skills and competencies associated with teaching. Planning for instruction, evaluation of learning, questioning and presenting techniques, use of special methods such as small groups, use of audiovisual materials, and techniques and procedures peculiar to the major-content area are emphasized. Micro-teaching, video taping and audio taping of performance, group-evaluation and the opportunity to try out short units with groups of students allow the candidate to evaluate and modify his behaviors in desired directions.

The fourth, or Practicum, phase enables the candidate to interact again with secondary students in the learning process. As a member of two- or three-member team, he is able to practice those skills acquired in the previous two phases. With the help of his fellow candidate(s), the directing teacher (a school employee), and the University supervisor, he modifies and sharpens existing competencies and develops new competencies demanded by the classroom situation. With full responsibility for the classroom situation in his hands, a reasonably accurate self-appraisal of his abilities to function as a teacher should be made by the candidate in this phase.

"The final phase, the Closure phase, might more appropriately be termed "entering the profession." Presented here is some of the information which professional teachers should have about how schools are organized, financed, and administered; trends and innovative attempts in education; and the politics of belonging to a faculty and the profession. Factors important in obtaining a position--such as certification, placement practices and salary schedules and other benefits--are considered in this phase.
To get started in Phase I as a sophomore:

1. Pre-register for Phase I at a preregistration session as announced. Watch bulletin boards around the Education building.

2. Take the required tests as scheduled. Watch bulletin boards around the Education building. This can be done anytime during the Sophomore year, but must be done before being admitted to STEP.

3. Register for Phase I during either your 2nd or 3rd quarter as a Sophomore.

4. Attend Phase I orientation session. This will be announced on the Phase I bulletin board, 2nd floor of the Education building.

5. Before the end of Phase I, be sure you have
   a) taken the reading and spelling tests
   b) maintained a 2.00 G.P.A.
   c) had a Mantoux test and X-Ray to determine freedom from tuberculosis
   d) obtained speech clearance

If you need speech remediation or reading remedial work, the sooner you get started the better. Take these tests as soon as you are reasonably sure of going into secondary teaching.

Once you have registered for Phase I, what you need for continuation in STEP will be made clear to you.

Some hints:

Some courses that fit into liberal education requirements, into elective patterns, etc. serve as good background for the STEP program. Some of these are:

- Sociology 1-100. Problems of American Society
- Sociology 3-170. General Social Psychology
- Sociology 3-190. Current Social Issues
- Sociology 3-700. Social Psychology
- Sociology 3-720. Attitude and Behavior Change
- Sociology 5-119. Sociology of Education
- Speech 1-111. Beginning Public Speaking
- Speech 1-121. Advanced Public Speaking
- Speech 1-202. Interpersonal Communication
- Speech 3-101. Persuasion
- Speech 3-121. Discussion and Group Methods
- Political Science 1-010. American Government and Politics
- Political Science 3-310. Public Opinion and Propaganda
- Psychology 1-003. General Psychology
- Psychology 1-501. Human Development and Adjustment
- Psychology 1-502. Personal Development, Orientation to Learning
- Psychology 3-201. Social Psychology
- Psychology 3-321. Adolescent Development
- Home Economics 1-250/1-260. Family and Child Development
- Geography 1-201. Man and His Habitat
- English 1-111, 1-112. Advanced Writing
- English 3-902. Composition for Teachers
- Biology 1-102. Biology and Man
- Biology 1-009. Upside Down Biology
(student's name) had the following laboratory result (check one or both)

- Test
  - a negative Mantoux reading
- a negative X-Ray reading

Date of Test

Signed ________________________________
Position ______________________________
Date ________________________________
The Master of Education Degree Program at UMD is directed toward the professional improvement of teachers. Each degree candidate plans his individual degree program in consultation with a committee of faculty. This degree program is designed to meet the professional needs and goals of the student as they are clarified in the consultation process. Since each program is individually determined, no courses are prescribed in particular areas, there is no core of required courses, and no major thesis is required. Teachers will be encouraged to develop a minimal level of competence in areas that are thought to characterize a master teacher, however.

Admission to the program is based on a number of criteria. Past scholastic achievement as represented by the undergraduate grade point average and previous graduate level work is considered. A test of scholastic aptitude is required. The candidate's potential for using the results of past baccalaureate study to exert leadership in instructional improvement is evaluated by immediate supervisors, colleagues and program faculty. The extend to which the candidate has profited from experience and other non-formal learning is evaluated by supervisors and colleagues. Weakness in any one of these areas can be compensated for by strengths in the others.

Once admitted, a candidate must prepare a well defined, explicitly stated statement of goals and objectives for his graduate study. In consultation with a group of program faculty, these are measured against his level of knowledge and competence in the areas of curriculum, instructional methodology, classroom sociology, learning and the content in his teaching specialty. His program is then planned to meet his identified needs and goals.

An advisement committee is appointed to help the student achieve his program objectives. These may be reached through work in content classes, learning, instructional theory and technology, curriculum, etc., through workshop participation, through classroom experimentation, through curriculum development and the creation of instructional materials and other ways. The work equivalent of 45 credits is needed for the degree, but flexibility in the way credit is provided for achievement is provided. In most cases, credit is given for specific achievement, not for attendance in classes for a given time. It is the responsibility of the advisement committee to guide the student, monitor his progress and decide when the student should be awarded the degree.

There is no residence requirement. Students can be registered to receive credit for work being done principally in the teaching situation. It is expected that much of the work that must be done on the campus will be done through the medium of summer courses, late afternoon, evening and Saturday classes. Off-campus classes, seminars, and individual conferences are arranged as needed.

Because flexibility in programming, credit provision and learning opportunity is provided, students should not expect to encounter lower performance requirements. Since credit and progress is based on the attainment of specific objectives and the ability to demonstrate particular competence, minimal standards set must necessarily be higher than the usual requirements for "passing" a course.

This program has been designed to blend well with in-service needs for both teachers and school district administrators. Teachers and administrators should explore ways by which the resources of the program can be used to meet both kinds of needs.

Form MEd-2-73
I. INTRODUCTION

This learning activity is designed to provide you with a 'survival kit" of information related to effects of various drugs in the human system, patterns of use and abuse and techniques to deal with individuals in trouble due to drug overdose. You will not be an expert but you should have sufficient information to deal intelligently with questions and problems related to use of drugs as they arise in your contacts with adolescents and peers. The information should provide you a base for further study into the field as your career may dictate.

Information about curricular trends in drug education, sample programs and an opportunity to hear from some of the local resource experts in the area of drug abuse prevention will be afforded you in Phase III in a SEEDPAC labeled "Drug Education Information."

You are urged to continue to update your information since patterns of drug use and abuse in our society change very rapidly. Listening to tales of your students and reading reports in the common mass-media publications will go far in keeping you abreast of the current situation.

II. CONCEPTS AND MAJOR AREAS

A. A historical overview

B. What is a drug

C. Common drug categories and effects
   1. Stimulants
   2. Depressants
   3. Narcotics
   4. Hallucinogens
   5. Marijuana
   6. Volatile Anesthetic Substances

D. Drug Laws

E. Area Resources
III. INQUIRES

1. What are the commonly abused drugs?

2. Who misuse a drug and for what reasons?

3. What are the effects of short-term and long-term use of drugs to the physiological system, to the psychological functioning of the individual?

4. What are appropriate courses of action to take when confronted with a drug related crisis?

5. What should be your position relative to the use of each of the commonly abused chemicals on the market?

IV. OBJECTIVES

Upon completion of this SEEFPAC you should be able to:

- List the commonly abused drugs
- List the physiological and psychological effects of each drug class on the human system
- Describe several reasons why each major drug class may be abused
- State local sources of assistance in dealing with drug problems and issues

V. LEARNING ACTIVITIES

A. View and learn the material in the AV series, "Information About Drugs" for STEP students available in the LRC. You may view these filmstrips and films in any sequence either individually or in small groups.

B. Read the material in Vol. I & II in the Drug Information Booklet published by the U.I.D. Center for Drug Education and Information. Copies are available at the Drug Center and from staff members of the Center and at the orientation meeting.

C. Interview two or more high school youngster's concerning their perception of the use of drugs at the school to which you are assigned. Likewise, interview one or two teachers on the same topic and compare their perceptions. Write up a brief two page report of your results and your own conclusions.
INTRODUCTION

As part of the trend toward more emphasis upon affective education, many teachers have become concerned about what role they should play in teaching values. There is a great deal of interest among teachers in how to integrate the teaching of values into various subject areas. The learning activities in this SEEDPAC are intended to acquaint you with one model of value education and stimulate you to think about how you will handle values in your own teaching.

OBJECTIVES

You should be able to do the following upon completion of this SEEDPAC:

1. Given a conversation between a teacher and a student involving values, formulate a clarifying response that you would make as the teacher and describe the effect it would have on the student.

2. Describe how other people have used clarifying responses with you.

3. Compare and contrast the value clarification approach with traditional ways of dealing with values in the classroom.

4. Differentiate between values and value indicators.

5. State the seven criteria that need to be present to call something a value.

6. Describe patterns of behavior that are characteristic of a person who lacks values.

7. Given a case study, write an analysis including an identification of values and value indicators and a description of what your role would be as the teacher in helping to clarify values.

INQUIRIES

1. What are some examples of value indicators from the classroom in which you are working?
2. What are the ten things you value the most?
3. Which of your values really meet the seven criteria?
4. What is the origin of your values?
5. To what extent are behavior problems in classrooms related to a lack of values?
6. Are values acquired through modeling?
7. What are some ways that your teachers have helped you to clarify your values?
8. Are there some values in your subject area that you feel compelled to teach? What are they?

Revised Spring 1974
LEARNING ACTIVITIES

A. Reading assignments (for LTD sessions)

D. Supplementary readings

C. Written Assignments
   1. Write one of the following papers
      a. Write an analysis of a conversation between a teacher and some students, focusing upon the parts dealing with values. You might want to limit this to the teacher and only one student. What values are expressed by the people involved? How would they stand up against the seven criteria? What value indicators are evident? How well did the teacher perform in terms of the value theory? Did the teacher try to impose his values? Were any values clarified in this discussion? Why or why not? Imagining yourself in a similar situation how could you have employed the value clarification approach? (copy of conversation available in STEP Office)
      b. Discuss the ideas presented in **Values and Teaching**, referring to experiences you are having in the classroom this term and experiences you have had as a student. If you have had a chance to try out the authors' suggestions, how well have they worked? What limitations do you see in their approach? Describe some specific ways that you can incorporate value clarification into the courses you plan to teach.
   2. Prepare one LTD outline
      a. Chaps. 1-9

D. Tape Session
   1. "Brainwashing Tape" (this tape will be played at one of the sessions)

E. Participate in LTD discussions

EVALUATION

Evaluation will include three components
A. Written work: One paper
B. Participation in LTD discussions
C. Work in the classroom as evaluated by supervising teacher
INTRODUCTION

One of the most difficult problems you will face as a teacher is that of motivation. Developing motivational techniques that will work in your own classroom will be much easier if you have a basic understanding of operant and classical conditioning, an approach to motivation that will be emphasized in this SEEDPAC. Conditioning will be discussed in terms of what happens between teachers and students in the classroom situation. One of the most important goals will be to formulate a position of your own in regard to the issue of "teaching as manipulation." Approaches to motivation that are quite different from the one presented here will be included in other SEEDPACS.

OBJECTIVES

You should be able to do the following upon completion of this SEEDPAC:

1. Given examples of operant and classical conditioning as presented in descriptions of classroom incidents and case studies, a) identify what type of conditioning is involved; and b) apply the appropriate conditioning terminology to specific examples;

2. Describe examples of operant and classical conditioning that you have observed in your field experience.

3. Define, in your own words, the terms positive reinforcement, negative reinforcement, and punishment, and relate each of these terms to examples from your field experience.

4. Describe the relationship between attitude formation and classical conditioning by referring to something you have experienced in your classroom this term or an earlier experience you have had as a student.

5. Compare and contrast operant and classical conditioning.

6. Analyze your own approach and avoidance behavior (especially in regard to education) by referring to experiences you have had that involved classical conditioning.

7. Formulate a written response to the questions listed under "inquiries".

INQUIRIES

1. Can you teach without manipulation?
2. How do students manipulate teachers? Can you relate some examples to conditioning?
3. What is modeling?
4. To what extent have teachers served as models for your behavior?
5. To what extent should a teacher be concerned about the modeling effect he has upon his students?
6. What are some common practices of teachers that elicit bad feelings in students?
7. What are some ways that teachers can elicit good feelings in students?
8. What are the most powerful reinforcers for the students you are working with?
9. What are the most powerful reinforcers for you?
10. In what types of situations do you purposely arrange ways of reinforcing yourself for certain behaviors? How effective is this type of reinforcement?
11. What is the rationale for using a token economy?
12. What kinds of token economies have you experienced in and out of the classrooms? How effective are they?
13. How can the principles of conditioning be applied to human relations?
14. What is your position on the use of punishment?
15. Who gets reinforced the most in a typical high school?
16. Do you have to have punishment to have discipline?
17. What would happen if no one looked at you when you were talking in a group?
18. What behaviors do schools reinforce most often?

LEARNING ACTIVITIES

A. Reading assignments (for LTD sessions)
2. "Teaching Strategies", by Richard Prawatt and Judith Henderson (handout)
3. "Teaching Defined", by Richard Prawatt and Judith Henderson (handout)

B. Supplementary readings
1. Psychology Applied to Teaching, by Robert F. Biehler, Chap. 5

C. Written assignments
1. Paper on "Teaching as Manipulation". Select one or two examples of both operant and classical conditioning from your field experience. Describe these examples in as much detail as possible, demonstrating that you have mastered the terminology that is commonly used in conditioning theory. For operant conditioning discuss ways that your teacher reinforces students and what types of behavior are maintained over a period of time. Describe how certain attitudes may result from situations involving classical conditioning. What moral and ethical considerations should teachers be aware of in regard to manipulating students through the use of conditioning? Can you teach without manipulation? Describe how your own teachers have elicited good and bad feelings in students. What are the most effective reinforcers for the students you work with? What is most reinforcing for you?
2. Prepare two LTD outlines
   a. Chaps. 1-6 Motivating Children: "Teaching Strategies" (handout)
   b. Chaps. 7-11 Motivating Children: "Teaching Defined" (handout)

D. Participate in LTD discussions

EVALUATION

Evaluation will include three components
A. Written work: One paper LTD outlines
B. Participation in LTD discussions
C. Work in the classroom as evaluated by supervising teacher
INTRODUCTION:

Written and oral communications cannot alone provide meaningful learning experiences for all pupils. These cannot best convey ideas, concepts or meanings in all cases. Even direct personal experiences have their limitations. Our senses of hearing, seeing, feeling, tasting and smelling have their limitations.

Various non-text materials of instruction enable us to improve our instruction in many ways - by extending our senses, making remote places accessible to us, providing enlargements, animations, capturing one-time occurrences, etc.

In this SEEDPAC you will learn how materials of this kind can be used in instruction and how to use the educational technology itself. You will be expected to use much of this technology in the remaining work in Phase III.

OBJECTIVES:

Upon completion of this SEEDPAC you should be able to do the following:

1. Describe the usefulness of a variety of non-text materials in different activities of teaching in general, and your major in particular.

2. Demonstrate skill in operation of a number of pieces of audio visual equipment and other learning aids.

3. Demonstrate the incorporation into instructional methods of a variety of non-text materials of instruction.

INQUIRIES:

Where can audio visual aids be obtained?

How can aids like overhead transparencies, pre-prepared charts, etc. facilitate learnings?

What audio visual or manipulative materials are available and useful in my teaching area?

What can be done in teaching using some kind of teaching aid that couldn't be done without the aid.

LEARNING ACTIVITIES:  (*is basic

A. READ

*1. This entire SEEDPAC


B. Do

*1. Go to the Learning Resource Center and be checked out on the performance as listed in Form A. (required)
C. VIEW

1. A videotape in the LRC that illustrates use of videotaping equipment. (required)
2. VMCET 19, "How to Prepare Teaching Performance Tests".

D. ATTEND

1. Any group meeting scheduled this SEEDPAC. Watch the STEP board for time and place. (required)

(Watch for video tape or film showings scheduled on short notice)

When you go to the LRC (Ed.123) to view and interact with the VIMCET programs:
1. Sign up on the sheet there when you check out the program
2. Take the pre-test
3. Work through the program
4. Go over the pre-test, changing answers you wish to
5. Turn in the pre-test at the desk.

ASSESSMENT:

Your completion of form A is the major performance. You will be also asked to respond in writing to one of the following.

1. List five sources of audio visual aid materials in your subject area.
2. Design and sketch the layout of a bulletin board on some topics in your subject area. How would it be used in a teaching lesson?
3. Describe specifically how you would use a filmstrip, film or transparency set you have seen recently in teaching a topic in your major.
4. Describe which two non-print instructional aids would be most useful to you in teaching in your major. Why?
5. React to each of the following:
   a. I'm putting all of my graphs, charts, and pictures on transparencies. This way I'll be able to have a much larger collection of materials in my limited storage space.
   b. I've given up using audio-visual aids. Every time I schedule one, something goes wrong. I waste an entire period.
   c. If you are being observed by your supervisor, show a film. This way you don't have to teach.
   d. Audio-visual aids have to be ordered so far in advance. When they finally arrive, I can't fit them into my schedule. If I have a slow class, they may not be ready for a particular film or filmstrip. If I have a bright class, they may have already covered the topic so the audio-visual aid is useless.
   e. Learning laboratories with all their gadgets are just another fad. They will soon be as obsolete as the language laboratory. All of these machines make learning a mechanical, not a creative process. Besides, neither teachers nor students know how to use learning laboratories effectively.
The following performances are expected of you. Some of these can be developed from activities in the Learning Resource Center. Others require you to use equipment in other locations. Sign up sheets are available for instruction and check-out on equipment not in the LRC.

<table>
<thead>
<tr>
<th>Performance</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Able to lead, run and rewind a short 16 mm Film</td>
<td></td>
</tr>
<tr>
<td>2. Able to record and playback own voice on a real tape recorder</td>
<td></td>
</tr>
<tr>
<td>3. Able to record and playback own voice on a cassette tape recorder</td>
<td></td>
</tr>
<tr>
<td>4. Able to load and run a cartridge film projector</td>
<td></td>
</tr>
<tr>
<td>5. Able to lead a filmstrip and project 3 frames</td>
<td></td>
</tr>
<tr>
<td>6. Able to load 10 slides, a slide projector and project 3 slides</td>
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</tr>
<tr>
<td>7. Able to load a VTR, tape a one minute segment and play it back on a monitor</td>
<td></td>
</tr>
<tr>
<td>8. Able to make an overhead transparency on a thermofax from a prepared master and project it</td>
<td></td>
</tr>
<tr>
<td>9. Able to prepare an original transparency and project it</td>
<td></td>
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<tr>
<td>10. Able to transfer sound from a record to tape</td>
<td></td>
</tr>
<tr>
<td>11. Able to prepare a ditto master and run copies</td>
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</tbody>
</table>
INTRODUCTION:

Teachers ask questions for a variety of reasons. They may want to determine how much students know about a specific subject, check to see if assignments have been prepared, stimulate interest in a topic, clarify points, obtain feedback on the effectiveness of a teaching strategy, or encourage reluctant students to participate in discussions. Future teachers need to develop a repertoire of questioning skills so they can channel thinking in desired directions.

Questions range from very specific to highly abstract. There are many ways to categorize or taxonomize questions. One convenient way is to use the Bloom Taxonomy of Educational Objectives. In this unit a simpler categorization will be used to make the acquisition of questioning skills easier.

The first skill to be developed is that of fluency in asking questions. This will make it easier for you to become competent at asking probing questions, higher order questions and divergent questions. Probing questions help to bring responses from students that show more penetrating thought. Higher order questions require students to make inference, discover relations and solve problems rather than merely calling on memory. Divergent questions have no "right" or "wrong" answers and are used to evoke creative and speculative responses in students.

Thinking stimulated by effective oral questioning can be reinforced by written questions that have the same range. The following criteria can help you judge effectiveness of your questioning as you practice questioning skills.

1. Distribute questions among the students so that many are encouraged to speak, and the discussion is not monopolized by a few.

2. Balance the kinds of questions asked by using factual, probing, higher order, and divergent questions, as appropriate.

3. Encourage students to give lengthy responses. Ask questions that require such answers, and use probing techniques.

4. Allow students ample time to think over the question

5. Ask clear and coherent questions. Rephrasing should be unnecessary.

6. Encourage student-to-student as well as teacher-to-teacher interactions.

7. Ask questions that cannot be answered merely with a "yes" or "no".

OBJECTIVES:

Upon completion of this SeEDPAC you should be able to

1. List specific functions to be performed by each of the following kinds of questions in instruction:
   - factual questions
   - descriptive questions
   - probing questions

Revised 1/74
higher order questions
heuristic questions
Demonstrate the following skills in asking questions
fluency in asking questions
asking of probing questions
asking of higher order questions
asking of divergent questions

2. Categorize questions asked in a period of instruction by others according to either the Bloom Taxonomy or the Taxonomy in this Unit.

3. Write questions to test achievement of specific objectives given or developed in the major content area.

INQUIRIES:
What can teachers do to find out if they are giving students opportunity for a variety of thought?

What can teachers do to evoke student responses that involve more than use of mere memory?

How can teachers keep from asking convergent questions most of the time?

What cause and effect relationships exist between skill in asking questions and student achievement?

How can teachers help students become better problem solvers and reflective thinkers through their questioning?

LEARNING ACTIVITIES: (★ are basic, others are supplementary)

READ
★1. The entire SEEDPAC
★2. Sanders, Norris, "Classroom Questions, What Kinds."
★3. Postman & Weingarten, Teaching As a Subversive Activity, Chapters 5, 6, 7.
★4. Leonard, General Methods of Effective Teaching - Chapter 6

VIEW
★1. film, "Fluency in Asking Questions"
★2. film, "Probing Questions"
★3. film, "Higher Order Questions"
★4. film, "Divergent Questions"
PARTICIPATE

1. In any group sessions scheduled for this SEEDPAC (required)
2. In the micro teaching sessions scheduled after this SEEDPAC (required)
   a. as a "student"
   b. as the "teacher" (see attached handout)

WRITE (required)

1. The outlines and plans for your micro teaching experience (micro teaching ?
2. Responses to the skill drills in this SEEDPAC as requested. (Pages 5, 7, 9)

SELF EVALUATION

Can you develop reasonable responses to the INQUIRIES?

Have you achieved the OBJECTIVES?

ASSESSMENT

You will be asked to categorize a set of questions given you in the STEP office. Your microteaching will be judged for quality of questioning.

QUESTIONING

Fluency in asking questions is basic to the development of more complex questioning skills. The first exercise is on acquiring fluency only so you should emphasize questions that can be answered from memory or by sensory perception - factual and descriptive questions are of this type. Who, what, when, where, often characterize factual questions. These ask students to recall facts which are important in themselves, which form part of a common knowledge or which are essential to generalization formation. "What is the atomic number of Zinc?" is an example. A descriptive question may involve more extended recall in that an organization of facts is needed. An example is "What are the four operations in a complete cycle of an internal combustion engine?"

To develop fluency in asking questions, do the following. (required)

1. Develop your theoretical background for this by the study activities of this SEEDPAC
2. View the film "Fluency in Asking Questions". Note the number of questions asked and the style used. Some questions are directed at individuals while others involve the entire group.

A teacher asks a question to provoke discussion. Nothing has ens. Why? Are the questions too simple? Are the students shy, not usual y taciturn? The likelihood of getting a good discussion going can be increased by asking questions that require more than superficial answers. One way is to forestall these answers by asking questions to which these are inappropriate. The other is to probe after a superficial answer has been given. Here the teachers cue is the student response, hence you cannot prepare probing questions in advance very easily. Therefore techniques should be familiar to you. Some of these are:

1. The teacher seeks clarification. He may ask the student for more information, or clarification, by saying:
   a. "What, exactly, do you mean?"
   b. "Please rephrase the statement."
2. The teacher seeks to increase the student's critical awareness. He wants the student to justify his response. Examples of appropriate probing questions are:
   a. "What are you assuming?"
   b. "What are your reasons for thinking that is so?"
   c. "Is that all there is to it?"
   d. "How many questions are we trying to answer here?"
   e. "How would an opponent of this point of view respond?"

3. The teacher refocuses the response. If a student has given a satisfactory response, it might seem unnecessary to probe it. However, the teacher could use this opportunity to refocus on a related issue. Examples of probing questions that might also refocus the response are:
   a. "If this is true, what are the implications for ...?"
   b. "How does John's answer relate to ...?"
   c. "Can you relate this to ...?"
   d. "Let's analyze that answer."

4. The teacher prompts the student. The teacher gives the student a hint to help him answer the question:
   Teacher: "John, what's the square root of 94?"
   John: "I don't know."
   Teacher: "Well, what's the square root of 100?"
   John: "Ten"  
   Teacher: "And the square root of 81?"
   John: "Nine"  
   Teacher: "Then what do we know about the square root of 94?"
   John: "It's between nine and ten."

5. The teacher redirects the question. This is not a probing technique per se, but it does help bring other students into the discussion quickly, while still using probing techniques. The teacher changes the interaction from himself and one student to himself and another student.
   Teacher: "What is the theme of Hemingway's Old Man and the Sea?"
   Sam: "It's about an old man's courage in catching a fish."
   Teacher: "Mary, do you agree?"
   or: "Mary, do you think it's that simple?"
   or: "Mary, can you elaborate on Sam's answer?"

These techniques have two main characteristics in common: they are initiated by the teacher immediately after the student has responded and they require the student to think beyond his initial response.
Do the following SKILL DRILL and hand in. (required)

**SKILL DRILL: PROBING QUESTIONS**

Directions: You are given a teacher's question and a student's response. Write a question that will probe the student's response. Use as many of the five probing techniques as you can. After you have completed the drill, ask another student in STEP to check your answers to see if he agrees that they are probing questions. Write probing questions for 10 of the 15 examples.

Example:

Teacher: John, why do you suppose the eastern side of the Sierra Nevada receives so little rain?

John: I don't know.

Probe: What did we learn about moisture in the air as it rises?

Student: But that tends to make it fall on the west side?

Joyn: I don't know.

Probe: What did we learn about moisture in the air as it rises?

1. Teacher: Why were most of the Indians on the side of the French during the French and Indian Wars?

Student: Because the Indians like the French better.

Probe:

2. Teacher: Despite so much evidence that smoking is strongly related to cancer, millions of people still smoke, Why do you suppose this is so?

Student: Because they like the taste.

Probe:

3. Teacher: How would your life be different if you didn't have to go to school?

Student: I wouldn't have to do homework.

Probe:

4. Teacher: How would human life be different if we had no thumbs?

Student: We couldn't throw a football very well.

Probe:

5. Teacher: What are the major differences today between the Republican and Democratic parties?

Student: There aren't any real differences, because neither party has an ideology that all members agree on. There are both conservative Republicans and conservative Democrats. I don't think there really are any differences between them.

Probe:

6. Teacher: Why are the endocrine glands sometimes referred to as "ductless?"

Student: I don't know.

Probe:

7. Teacher: Suppose you were going to run for Congress. What kinds of things would you do to help yourself get elected?

Student: I'd try to get people to contribute money to my campaign.

Probe:
8. **Teacher:** Why do so many people in our society have some kind of tooth decay?
   **Student:** They probably eat too many sweet things.

9. **Teacher:** If you could be any character in literature, who would you be?
   **Student:** I'd be Sherlock Holmes so I could solve a lot of mysteries.

10. **Teacher:** What are some of the differences between a novel and a short story?
    **Student:** The novel is longer, and a short story often has a surprise ending.

11. **Teacher:** What is a bigamist?
    **Student:** I don't know?

12. **Teacher:** Why is the grass green?
    **Student:** Because it has chlorophyll in it.

13. **Teacher:** Compare the serfs' lives before and after their emancipation.
    **Student:** There really wasn't much difference because they weren't free.

14. **Teacher:** Why is cotton cooler to wear in hot weather than wool?
    **Student:** Because wool is heavier than cotton, and the more cloth you have the hotter you are.

15. **Teacher:** What problems do some African nations have in promoting a spirit of nationalism among their people?
    **Student:** Because they're made up of many different tribes who used to be enemies.

**Probe:**

Higher order questions cannot be answered from memory alone. They require abstract thinking on the part of the student in the sense of comparing and contrasting, drawing inferences and perceiving cause and effect relationships. Students are prompted to discover concepts and use ideas. Generally the key word is "Why". However, why alone does not characterize a higher order question - it may only elicit a memorized set of reasons. Higher order questions can perform 6 different functions:

1. **Ask for evaluations:** These have no "right" answers; they deal with choice, judgment and value. The answers are subjective in nature. An example is: Assuming equal resources, who would you rate as the more skillful general, Robert E. Lee or U. S. Grant? Why?

2. **Ask for inferences:** Inferences involve deductive or inductive thinking. Deduction is reasoning from a general principle to a specific case - induction is the discovery of a generalization from a variety of cases. If the temperature of the gas remains constant, but the gas is taken to a new altitude 4000 ft. higher, what happens to the pressure? Why?

We have examined the qualities these world leaders have. What might we conclude, in general, about the qualities needed for leadership? Why?
3. **Ask for comparisons**

Here we ask students to determine if ideas or objects are similar, dissimilar, unrelated or contradictory.

"Is a mussel the same as a clam? Explain"

"What are the similarities between Lincoln's Gettysburg Address and Pericles' Funeral Oration?"

"Compare the life cycle of the honey bee with that of the ant."

"What is the connection between the principles of Social Darwinism and the Supreme Court decisions of the 19th century?"

4. **Ask for application of concepts or principles**

Teachers usually test for the understanding of a concept or principle by asking a student to use it in a context different from that in which it was learned.

"How was Gresham's Law demonstrated in the Weimar Republic?"

"Can you think of another example that fits this definition?"

5. **Ask for problem solving**

Questions of this type ask students to use previously learned knowledge to solve problems new to them. They often demand creative effort by the student. A major step in problem solving is deciding what facts or skill are relevant.

Given this information, what solutions for the food shortage can you propose?

6. **Ask for cause and effect**

These questions ask students to perceive causal relationships between events and persons, objects, ideas or events.

How would the lowering of the discount rate by the Federal Reserve Board affect the existing inflationary trend?

Sustained higher order questioning is difficult, but practice should result in your becoming more versatile and effective.

To develop skill in asking higher order questions: 1) View the film "Higher Order Questions"

2. Do the following SKILL DRILL and hand in (required) SKILL DRILL: HIGHER ORDER QUESTIONS

**Directions:** Modify these factual questions so that they become higher order questions. After you have done this, ask another STEP student to check your questions to see if he agrees that they are higher order. Try to use as many of the six kinds of higher order questions as you can. Write higher order questions for 10 of the 19 examples.

**Example:**

(Factual) What famous trial in Tennessee tested a teacher's right to teacher evolution?

(Higher Order) Why would you have expected the Scopes trial to take place in the South rather than in New England?

1. What is the most common element found in the earth's crust?
   Higher Order:

2. What is the largest city in California?
   Higher Order:

3. Who was the captain who chased the great whale, Moby Dick?
   Higher Order:
4. In what person is the novel *Huckleberry Finn* written?  
Higher Order:

5. What is the name of this painting?  
Higher Order

6. What kind of car is that?  
Higher Order

7. What does the Pythagorean Theorem tell us?  
Higher Order

8. What are the names of the planets, starting with the one closest to the sun?  
Higher Order

9. When was Franklin D. Roosevelt first elected president?  
Higher Order:

10. Who was the author of "A Modest Proposal?"  
Higher Order:

11. Where is Stonehenge located?  
Higher Order:

12. When was the great stock market crash?  
Higher Order:

13. Of what element is sulfuric acid composed?  
Higher Order:

14. What is the geometrical definition of a tangent?  
Higher Order:

15. What are the aborigines who live in Australia called?  
Higher Order:

16. What is the most widely spoken native language in Africa?  
Higher Order:

17. What is the temperature of absolute zero?  
Higher Order:

18. What famous formula related to the conservation of energy did Albert Einstein discover?  
Higher Order:

19. What mountain city is only fifteen miles from the equator?  
Higher Order:

The least asked question in the classroom is the divergent or heuristic or creative question. This kind of question has no "right" answer. It is open ended and students are expected to reach into the unknown or the implausible for answers. It is designed to allow students to express themselves in a creative fashion.

"What might happen to the economy if the internal combustion engine was outlawed?"

"How might the novel have been different if the lead character was a cripple instead of an athlete?"
To develop skill with using divergent questions:

1. View the film "Divergent Questions"
2. Do the SKILL DRILL below and hand in (required)

SKILL DRILL: DIVERGENT QUESTIONS

Directions: Modify these factual and higher order questions so that they become divergent questions. After you have done this, ask another STEP student to check your questions to see if he agrees that they are divergent. Write divergent questions for 10 of the 20 examples.

Example: (Factual) Of what elements is the earth's atmosphere composed? (Divergent) How would exploration on the moon be different if the moon had the same atmosphere as the earth?

1. What eighteenth-century person reportedly said, "Let them eat cake?" Divergent:
2. Where is the lowest spot in the Western Hemisphere? Divergent:
3. What is the largest living thing in the world? Divergent:
4. Who are the two main characters in Robert Louis Stevenson's Treasure Island? Divergent:
5. What are the three main branches of the federal government? Divergent:
6. What is the Gallup Poll? Divergent:
7. When was the radio invented? Divergent:
8. What is the present population of the United States? Divergent:
9. Given equal resources, who would you rate as the more skillful general, Robert E. Lee or Ulysses S. Grant? Why? Divergent:
10. What is the relationship between inflation and buying power? Divergent:
11. What will happen if the pressure in an empty can is less than the pressure of the air? Divergent:
12. How much gold does the United States government own? Divergent:
13. What language is spoken in Brazil? Divergent:
14. How many years did it take Michelangelo to paint the Sistine Chapel?
Divergent:

15. What great composer wrote The Unfinished Symphony?
Divergent:

16. What famous style of architecture was developed during the Middle Ages?
Divergent:

17. Name one substance from which paper can be made?
Divergent:

18. When did the Communists take control of China?
Divergent:

19. What was the most prominent third political party in the United States during the last half of the nineteenth century?
Divergent:

20. Why did Chicago's geographical location contribute to the city's rise in population?
Divergent:
Microteaching Session #2

Purposes: To provide an opportunity to practice questioning skills as part of a small group "inquiry" session.

Recommended length: 10 minutes

Instructions:

For this session, you should develop a short lesson based on asking a number of related questions. During the first 3 minutes concentrate on asking as many questions as you can. During the remaining time, select one or two areas of inquiry opened in the first 3 minutes and try to develop reflective thought in these areas.

1. Write the questions you expect to ask. Obviously circumstances will dictate whether you delete from, add to or otherwise alter this plan as the lesson progresses. State clearly the concepts your questions are designed to stimulate students to discover or reflect on.

2. View the videotape of your work. Did you ask questions that required students to give information or clarify answers? Did you ask students to justify responses? Did you ask questions that encouraged other students to get into the discussion?

3. Study the evaluations of your "students"

Hand in

A self evaluation of your use of questioning skills
Evaluation: Microteaching #2

Purpose: Practice questioning skills

Name of Student ___________________________ Date ___________ ___________

Length of lesson ___________ min.

1. __yes ___ no Did the teacher ask questions that required students to give more information or clarify answers? e.g. What do you mean?

2. __yes ___ no Did the teacher ask questions requiring students to justify responses? e.g. "Why do you think so?"

3. __yes ___ no Did the teacher ask questions requiring students to relate one issue to another, "What are implications of this for _________?"

4. __yes ___ no Did the teacher ask any questions for which there were no right or wrong answers?

5. List what you thought to be the three best questions students asked

6. [Blank space]

Completely shade the bar to indicate use of

[] [ ] [ ] [ ]

low order, e.g. convergent divergent application

Yes, No or a single fact requiring on answer

Questions
INTRODUCTION

Before you plan an instructional program, you must determine what the goals and objectives of the instruction are going to be. The general goals and/or terminal objectives must be stated in behavioral terms if you are to know when the objectives are being achieved. Goals must be analyzed and performances indicative of successful attainment identified. Prerequisite skills and/or learnings need to be identified and analyzed to assist in planning for sequence of instruction.

In this SEEDPAC you will study some general goals and goals specific to your academic major. You will learn to express objectives related to these goals in behavioral terms. You will learn to analyze a goal into its component parts and to determine the prerequisite learnings necessary to establish readiness of individual learners for the desired tasks to be learned. You should develop an appreciation for the importance of properly sequenced instruction. Your experiences in this SEEDPAC should help you to select appropriate learning experiences and sequence them effectively.

OBJECTIVES

Upon completion of this SEEDPAC, you should be able to:

1. Identify some commonly accepted goals of instruction in your major area.
2. Classify objectives as to implicit or explicit; as in the cognitive, affective, or psychomotor domain; as to the level of functioning or learning.
3. List or identify the criteria for evaluating a behavioral objective.
4. Describe justifiable criterion levels for behavioral objectives in your major.
5. Write at least one objective for each level of the Bloom cognitive taxonomy.
6. Write behavioral objectives in the affective domain.
7. Recognize objectives as being vague and unmeasurable and convert them to behavioral objectives.
8. Generate objectives that encourage creative or divergent thinking.
9. Give some arguments for and against the use of behavioral objectives.
10. Develop some relevant performance objectives for given goals.
11. Develop some entry and enroute objectives for given goals.
12. Perform a task analysis for a desired performance.
13. Describe the prerequisite skills for performance of a given task.
14. Sequence a set of behaviors in terms of complexity and/or a prerequisite relationship.
15. Develop a sequence of performances that lead from a specific entry behavior to specific terminal behavior.
INQUIRIES

1. What are the reasons for having courses in your major in secondary schools?
2. What vocational, social and personal needs are met by study in your major area?
3. How should you determine what your goals are going to be for the courses you teach?
4. What are the commonly accepted goals for instruction in your major area for the secondary schools?
5. What is the behavior of students who have achieved the goals as described in answer to inquiry 4?
6. What are the characteristics of a well-stated behavioral objective?
7. What are some affective goals for your major area toward which you should direct your teaching?
8. How do you change vague goals into explicit objectives?
9. What are the learning models which help define the level of learning that is taking place? How do these learning models help the teacher to sequence instruction? How do these models help the teacher evaluate learning at all levels? What are the significant differences, if any, between the learning models?
10. What is meant by goal analysis, task analysis and performance analysis?
11. How do I sequence learning experiences in order to be most sure of reaching a desired learning outcome?

LEARNING ACTIVITIES

A. If you wish, you may take the pretest to help direct your learning. It is the pretest for VINCET #11, "Analyzing Learning Outcomes." (LRC Center)

B. READ
*1. Hager, Preparing Instructional Objectives. A "how to do it" book which was the original "bible" for writing behavioral objectives.
*3. Plowman, Behavioral Objectives. Tells how to write them with chapters for a number of academic areas.
*6. Van Til, Curriculum: Quest for Relevance. This is a collection of articles and talks that will help you get a feeling for some of the hassles relevant to the schools' curriculum.
10. deCesare, The Psychology of Learning and Instruction. Part I will help you get a "handle" on the Glaser model.
*11. Hager, Goal Analysis. This paperback will help.
*14. Be sure to refer to those sources indicated on your special methods addendum.
C. LISTEN AND SEE

1. VIILCET programs 1, 3, 9, 10, 25 and 11 are the ones that relate to this package. VIILCET #10 "Identifying Affective Objectives" will help you do just that. #11, "Analyzing Learning Outcomes" should be helpful.

2. Filmstrip program, "The Hierarchy of Knowing Where You Are Going."

D. ATTEND and PARTICIPATE in the group meetings scheduled for this SEEDPAC.

E. WRITE

¹. Write 5 goals for the unit in SEEDPAC 13 that you are working on. For these 5 goals, write one low order and one high order behavioral objective. (Be sure these objectives include all the components for a well written objective).

². Write five affective behavioral objectives for a course in your major area or for the unit in SEEDPAC 13.

³. Obtain a goal for instruction in your major area from the STEP office (if one is not available, write your own).
   a. Describe in writing a performance that would indicate achievement of that goal.
   b. Describe the components of that performance that might be independently performed.
   c. Describe any prerequisite behaviors the learner would be expected to have in order to develop the performance expected.
   d. Describe any prerequisite or entering behaviors you might pre-test for before starting instruction on this task.

ASSESSMENT

Could you give evidence of having achieved the OBJECTIVES of this SEEDPAC? Have you given adequate study to the INQUIRIES?

1. Your written assessment will be to answer two questions chosen from the following:

   a. What commonly expressed criticisms of objectives can be avoided by the careful writing of behavioral objectives?

   b. Give two arguments for giving each student a set of objectives that describe the desired outcomes for a unit of instruction and two arguments against such a procedure.

   c. Distinguish between individual and group objectives.

   d. Define a behavioral objective. Include in your definition the required components of a well written behavioral objective. Give a good example.

   e. Describe how and when behavioral objectives should be sequenced.

   f. What is the significance of Bloom's Taxonomy, Gagne's Cumulative Learning Model or any other learning hierarchy for the teacher?

2. Your product assessment consists of those written for part E of the SEEDPAC.

3. Be sure to include any products asked for on your special methods addendum.
Definition

An educational objective consists of a description of the behaviors of an individual (the learner or examinee) in relation to his processing information embodied in subject matter -- that is, what the learner must be capable of doing with certain characteristics or properties of subject matter. The behavioral component, which may be described as a process involved at an appropriate level of the taxonomic classification, is usually expressed in the form of a noun "ability" or a verb of being "able" followed by an infinitive such as the "ability to do" or "able to do." The second component of the objective, which consists of the specific content often found in the formal learning experience (e.g., in the curricular or instructional unit), constitutes a direct object of the verb of infinitive form. The terms "subject matter" or "content" are used in a fairly broad sense, as their level of specificity is highly variable, depending upon the characteristics of the curricular unit.

Instrumentation

To facilitate the formulation of statements of specific behavioral objectives within the framework of Bloom's taxonomy, the writers have included a table made up of three columns. The first column contains the taxonomic classification identified by both code number and terminology employed in Bloom's (1965) taxonomy. The entries in the second column consist of appropriate infinitives which the teacher or curriculum worker may consult to achieve a precise or preferred wording of the behavior or activity desired. In the third column somewhat general terms relative to subject matter properties are stated. These direct objects, which may be expanded upon to furnish specificity at a desired level, may be permuted with one or more of the infinitive forms to yield the basic structure of an educational objective -- activity (process) followed by content (subject matter property). At the discretion of the reader the words "ability" or "able" can be inserted in front of each of the infinitives.

Table I Instrumentation of the Taxonomy of Educational Objectives: Cognitive Domain

<table>
<thead>
<tr>
<th>Taxonomy Classification</th>
<th>Examples of Infinitives</th>
<th>KEY WORDS</th>
<th>Examples of Direct Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 Knowledge</td>
<td></td>
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<tr>
<td>1.10 Knowledge of Specifics</td>
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<tr>
<td>1.11 Knowledge of Terminology</td>
<td>to define, to distinguish,</td>
<td>vocabulary, terms, terminology, meaning(s), definitions, referents, elements</td>
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<tr>
<td></td>
<td>to acquire, to identify,</td>
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<tr>
<td></td>
<td>to recall, to recognize</td>
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<tr>
<td>1.12 Knowledge of Specific Facts</td>
<td>to recall, to recognize,</td>
<td>facts, factual information, (sources), (names), (dates), (persons), (places), (time periods), properties, examples, phenomena</td>
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<tr>
<td></td>
<td>to acquire, to identify</td>
<td></td>
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<tr>
<td>1.20 Knowledge of Ways and Means of Dealing with Specifics</td>
<td>to recall, to identify,</td>
<td>forms), conventions, uses, usage, rules, ways, devices, symbols, representations, style(s), format(s)</td>
<td></td>
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<tr>
<td>1.21 Knowledge of Conventions</td>
<td>to recognize, to acquire</td>
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<tr>
<td>Taxonomy Classification</td>
<td>Examples of Infinitives</td>
<td>Examples of Direct Objects</td>
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<tr>
<td>1.22 Knowledge of Trends, Sequences</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>action(s), processes, movement(s), continuity, development(s), trend(s), sequence(s), causes, relationship(s), forces, influences</td>
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<tr>
<td>1.23 Knowledge of Classifications and Categories</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>area(s), type(s), feature(s), class(es), set(s), division(s), arrangement(s), classification(s), category/categories</td>
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<tr>
<td>1.24 Knowledge of Criteria</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>criteria, basics, elements</td>
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<tr>
<td>1.25 Knowledge of Methodology</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>methods, techniques, approaches, uses, procedures, treatments</td>
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<tr>
<td>1.30 Knowledge of the Universals and Abstractions in a Field</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>principle(s), generalization(s), proposition(s), fundamentals, laws, principal elements, implication(s)</td>
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<tr>
<td>1.31 Knowledge of Principles, Generalizations</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>theories, bases, interrelations, structure(s), organization(s), formulation(s)</td>
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<tr>
<td>1.32 Knowledge of Theories and Structures</td>
<td>to recall, to recognize, to acquire, to identify</td>
<td>meaning(s), sample(s), definitions, abstractions, representations, words, phrases</td>
<td></td>
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<tr>
<td>2.00 Comprehension</td>
<td>to translate, to transform, to give in own words</td>
<td>relevancies, relationships, essentials, aspects, new view(s), qualifications, conclusions, methods, theories, abstractions</td>
<td></td>
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<tr>
<td>2.10 Translation</td>
<td>to interpret, to reorder, to rearrange, to differentiate, to distinguish, to make, to draw, to explain, to demonstrate</td>
<td>consequences, implications, conclusions, factors, ramifications, meanings corollaries, effects, probabilities</td>
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<tr>
<td>2.20 Interpretation</td>
<td>to estimate, to infer, to conclude, to predict, to differentiate to determine, to extend, to interpolate, to extrapolate, to fill in, to draw</td>
<td>principles, laws, conclusions, effects, methods, theories, actions, situations, generalizations, processes, phenomena, procedures</td>
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<tr>
<td>2.30 Extrapolation</td>
<td>to apply, to generalize, to relate, to choose, to develop, to organize, to use, to employ, to transfer, to restructure, to classify</td>
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<tr>
<td>3.00 Application</td>
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<tr>
<td>Examples of Infinitives</td>
<td>Key Words</td>
<td>Examples of Direct Objects</td>
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<td><strong>4.00 Analysis</strong></td>
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<tr>
<td>4.10 Analysis of Elements</td>
<td>to distinguish, to detect, to identify, to classify, to discriminate, to recognize, to categorize, to deduce</td>
<td>elements, hypothesis/hypotheses, conclusions, assumptions, statements (of fact), statements (of intent), arguments, particulars</td>
<td></td>
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<tr>
<td>4.20 Analysis of Relationships</td>
<td>to analyze, to contrast, to compare, to distinguish, to deduce</td>
<td>relationships, interrelations, relevance, relevancies, themes, evidence, fallacies, arguments, cause-effect(s), consistency/consistencies, parts, ideas, assumptions</td>
<td></td>
</tr>
<tr>
<td>4.30 Analysis of Organizational Principles</td>
<td>to analyze, to distinguish, to detect, to deduce</td>
<td>form(s), pattern(s), purpose(s), point(s) of view, techniques, bias(es), structure(s), theme(s), arrangement(s), organization(s)</td>
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<td><strong>5.00 Synthesis</strong></td>
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<td>5.10 Production of a Unique Communication</td>
<td>to write, to tell, to relate, to produce, to constitute, to transmit, to originate, to modify, to document</td>
<td>structure(s), pattern(s), product(s), performance(s), design(s), work(s), communications, effort(s), specifics, composition(s)</td>
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<tr>
<td>5.20 Production of a Plan, or Proposed Set of Operations</td>
<td>to propose, to plan, to produce, to design, to modify, to specify</td>
<td>plan(s), objectives, specification(s), schematic(s), operations, way(s), solution(s), means</td>
<td></td>
</tr>
<tr>
<td>5.30 Derivation of a Set of Abstract Relations</td>
<td>to produce, to derive, to develop, to combine, to organize, to synthesize, to classify, to deduce, to develop, to formulate, to modify</td>
<td>Phenomena, taxonomies, concepts(s), scheme(s), theories, relationships, abstractions, generalizations, hypothesis/hypotheses, perceptions, ways, discoveries</td>
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<tr>
<td><strong>6.00 Evaluation</strong></td>
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<tr>
<td>6.10 Judgments in Terms of Internal Evidence</td>
<td>to judge, to argue, to validate, to assess, to decide</td>
<td>accuracy/accuracies, consistency/consistencies, fallacies, reliability, flaws, errors, precision, exactness</td>
<td></td>
</tr>
<tr>
<td>6.20 Judgments in Terms of External Criteria</td>
<td>to judge, to argue, to consider, to compare, to contrast, to standardize, to appraise</td>
<td>ends, means, efficiency, economy/economies, utility, alternatives, courses of action, standards, theories, generalizations</td>
<td></td>
</tr>
</tbody>
</table>
Although within a given major process level or sublevel of the taxonomy each infinitive cannot in all instances be meaningfully or idiomatically paired with every direct object listed, many useful permutations of infinitives and direct objects that furnish entirely readable statements are possible. Certainly use of these tables should lead to a substantial gain in the clarity and speed with which teachers and curriculum specialists, as well as those involved in construction of achievement tests, may state curricular objectives. The writers have found that these tables have been of considerable help to their students, as well as to personnel in public schools who are concerned with writing objectives prior to curriculum development, constructing test items, or to carrying out evaluation studies. Slight modifications can be made with the entries to meet the requirements of specific learning situations.

**Instrumentation: Affective Domain**

The instrumentation of the Affective Domain is the same as that of the Cognitive Domain, to wit, the selection of behaviorally oriented infinitives combined with selected direct objects. As in the case of the Cognitive Domain, these are to be conceptualized as examples for the stimulation of other infinitives and objects and, more important, meaningful objectives in a total framework.

<table>
<thead>
<tr>
<th>Taxonomy Classification</th>
<th>Examples of Infinitives</th>
<th>Examples of Direct Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Receiving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Awareness</td>
<td>to differentiate, to separate, to set apart, to share</td>
<td>sights, sounds, events, designs, arrangements</td>
</tr>
<tr>
<td>1.2 Willingness to Receive</td>
<td>to accumulate, to select, to combine, to accept</td>
<td>models, examples, shapes, sizes, meters, cadences</td>
</tr>
<tr>
<td>1.3 Controlled or Selected Attention</td>
<td>to select, to posturally respond to, to listen (for), to control</td>
<td>alternatives, answers, rhythms, nuances</td>
</tr>
<tr>
<td>2.0 Responding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Acquiescence in Responding</td>
<td>to comply (with), to follow, to commend, to approve</td>
<td>directions, instructions, laws, policies, demonstrations</td>
</tr>
<tr>
<td>2.2 Willingness to Respond</td>
<td>to volunteer, to discuss, to practice, to play</td>
<td>instruments, games, dramatic works, charades, burlesques</td>
</tr>
<tr>
<td>2.3 Satisfaction in Response</td>
<td>to applaud, to acclaim, to spend leisure time in, to augment</td>
<td>speeches, plays, presentations, writings</td>
</tr>
<tr>
<td>3.0 Valuing</td>
<td></td>
<td></td>
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</tbody>
</table>
3.1 Acceptance of a Value  to increase measured proficiency in, to increase numbers of, to relinquish, to specify  group membership(s), artistic production(s), musical productions, personal friendships

3.2 Preference for a Value  to assist, to subsidize, to help, to support  artists, projects, viewpoints, arguments

3.3 Commitment  to deny, to protest, to debate, to argue  deceptions, irrelevancies, abdications, irrationalities

4.0 Organization

4.1 Conceptualization of a Value  to discuss, to theorize (on), to abstract, to compare  parameters, codes, standards, goals

4.2 Organization of a Value System  to balance, to organize, to define, to formulate  systems, approaches, criteria, limits

5.0 Characterization by Value or Value Complex

5.1 Generalized Set  to revise, to change, to complete, to require  plans, behavior, methods, effort(s)

5.2 Characterization  to be rated high by peers in, to be rated high by superiors in, to be rated high by subordinates in  humanitarianism, ethics, integrity, maturity

AND

to avoid, to manage, to resolve, to resist  extravagance(s), excesses, conflicts, exorbitancy/exorbitancies

Epilogue

... They had been discussing didactics and transitions and the student asked his tutor, "Master, what is needed to change the world?"
And the sage pondered, then replied, "A proper definition of things."

Attributed to Confucius
Fifth Century, D.C.

... And the Texan who claimed he has the best six-gun shot in the West would take those who challenged him to the side of an immense barn and fire aimlessly. He would find where his bullets had landed and then draw targets with his bullet in the bull's-eye every time!

Moral: He aimed at nothing so he couldn't miss!
PHASE III
Drug Education
and Information
Revised 9/74

PURPOSE:

In Phase II you completed a drug education SEEDPAC designed to assist you in gaining a working mastery of information about the commonly misused drugs. In this SEEDPAC you will be gaining information about some of the necessary components in an effective drug education program for the school and community and to study some of the forces that influence a program designed to prevent drug abuse.

ACTIVITIES:

1. Make arrangements to join one of the groups that will participate in a 2-3 hour sessions in the evening mid-way through the quarter. This session is designed to provide you with further information about drug education, discussion and simulation exercises orientated toward drug education & values clarification. This is a required activity.

2. View the filmstrip "Effective Teacher" parts II and III. These 35 mm filmstrips and cassette recordings are about 20 minutes in length each and are available anytime in the L.E.C. You may complete this anytime.

3. Read through the State of Minnesota Curriculum on Drug Abuse Prevention Education. (Official Title: Concepts on Chemicals: Drug Education Guidelines K-12)

   Copies of the guide are on loose reserve in the STEP Resource Center and may be checked out for several days at a time. Th's guide is one of the best single sources of good practical information on what teachers can do in the classroom.

4. Prepare a model curriculum proposal on how you would incorporate a drug information and/or drug attitude value clarification program into your subject area. Such a proposal should include the following:

   A. Description of anticipated setting (unless you have a solid idea of what or where you will be teaching someday, use your Phase II assignment as the example.)

      A paragraph or two should suffice.

   B. A brief "needs" assessment.

      Speculate in what your students already know and what they still need to know, or experience, or analyze, or whatever, in the broad area of drug education and information. Two or three paragraphs should suffice.

   C. Description of what you will present facilitate, manage, manipulate, arrange, etc. This is not to be as detailed as a teaching unit but should give the reader the big picture of what you anticipate doing in presenting the program. A page or so should suffice.

   D. Analyze your proposal as presented in the following contexts. Does your program agree with or deviate from the State of Minnesota curriculum guide which you read in /3? Give some examples. Does what you're planning agree with or disagree with the principles presented in the filmstrip, The Effective Teacher? Give some examples. Three or four paragraphs should suffice.
Overall the project paper should run about 4-5 pages typed (if possible) double space. Label each of the components described above as follows: Use the following as a guide to instructional program development.

It is hoped that this paper will exhibit some serious thought and research concerning drug education, as well as some attempts at creativity & innovation in producing a model curriculum.

<table>
<thead>
<tr>
<th>Identify Problems</th>
<th>Analyze Setting</th>
<th>Organize Management</th>
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<td>Assess Needs</td>
<td>Audience</td>
<td>Tasks</td>
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<td>Establish Priorities</td>
<td>Conditions</td>
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<td>State Problem</td>
<td>Relevant Resources</td>
<td>Time Lines</td>
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<td>Identify Objectives</td>
<td>Specify Methods</td>
<td>Construct</td>
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<td>Terminal</td>
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<td>Media</td>
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<td>Define</td>
<td>Instructional Materials</td>
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<tr>
<td>Test Prototype</td>
<td>Analyze Results</td>
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<td></td>
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<td>Evaluate</td>
<td>Objectives</td>
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<td>Collect Evaluation</td>
<td>Decide</td>
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<td>Data</td>
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Techniques
INTRODUCTION

In this SEEDPAC you will examine such issues as certification procedures; obtaining and losing a teaching position; contractual, financial and other conditions for teaching. You will learn to write letters of inquiry and application, define procedures for being placed in a position and engage in other activities that will make you an aware and informed professional.

OBJECTIVES

Upon completion of this SEEDPAC you should be able to:

1. Describe the three major requirements for certification in the State of Minnesota (or another state you might choose).
2. List the procedures for renewal of a certificate in Minnesota.
3. Describe three reasons for revocation of a teaching certificate in Minnesota.
4. Write a letter of inquiry about a teaching position incorporating four of the suggested criteria.
5. Write a letter of application for a teaching position that includes four suggested features.
6. Describe at least 3 arguments for and three arguments against permanent tenure for teachers.
7. State the major features of the Minnesota Continuing Contract Law.
8. Contrast the tenure regulations of the first class cities in Minnesota with the security provision of the continuing contract law.
9. Describe the steps a teacher can take when he is threatened with loss of a position or non-renewal of contract.
10. Outline a sequence of steps to take to obtain a teaching position.
   a) using the UMD Placement Office
   b) using a private or state placement office
   c) through your own initiative
11. State three projections of the number of teacher candidates who will compete for existing positions:
   a) the year you graduate
   b) five years after you graduate
   c) 15 years from now
   naming the source of the projection.
12. State a projection of the likelihood of your finding a position in the area of your certification in the year you graduate.
13. Describe three features of a salary schedule to be studied when analyzing a schedule.
14. List five essential pieces of information that should be included in a working contract.
15. List at least ten policies affecting conditions of teaching employment that are not found in the usual contract that you should investigate.
INQUIRIES

1. What are the steps that lead to initial certification?
2. What must you do to keep your certificate valid? How can it be revoked?
3. What do the following mean:
   a. tenure  b. certificate reciprocity
4. What constitutes a good letter of inquiry?
5. What steps should be taken to find a teaching position?
6. What does the short range and long range job market for teachers appear to be?
7. What are the important things to look for in a salary schedule?
8. How do the terms of a contract affect the rights and responsibilities of a teacher?
9. What other "policies" not included in a contract, are there that might affect a teacher?
10. What is tenure? How is it acquired?

LEARNING ACTIVITIES

A. READ (* are basic and required. ** are supplementary or enrichment)
   1. Reprint Package Ph V-1, available in the STEP office and the Reserve Room.
   3. Certification Handbook of Minnesota, 1972 (Can be checked out in the STEP office on reserve)
   4. Education Statutes No. 540 - 546 (STEP office)
   How often must you renew your certificate? What are renewal units?
   How are they earned?
   **5. Teacher Supply and Demand in Public Schools, 1971 Research Division, NEA.
   **6. Issuance and Renewal of Continuing Certificates.
   **7. Legal Copies Bulletin
   **8. Professional journals such as: Minnesota Teacher, Minnesota Education Journal, Today's Education, American Teacher, etc. (See Journal material in Reprint Package Ph II-1) to find recent information on these issues.

B. ATTEND
   1. any special activities scheduled for this SEEDPAC. See the STEP bulletin boards.
   2. Board of Education meetings or teachers meetings where these issues are discussed.

C. PARTICIPATE (* Required)
   *1. in any small group seminars scheduled for this SEEDPAC.

D. DO
   1. If you are interested in teaching in some state(s) other than Minnesota, request information on certification from the state Department of Education of that state. It usually has offices in the State Capitol.
   2. Go to the UMD Placement office and make sure you are properly availing yourself of its services.
   3. Interview a teacher to get his/her opinions on 1) salaries 2) tenure 3) certification 4) continuing certification
   4. Find copies of the salary schedules recommended by the state and national teachers organizations. How well are these reflected in existing salary schedules?
   5. Find names of at least three commercial teacher placement agencies that operate in Minnesota? in the state you expect to move to.
E. WRITE (* is required)
   *1. A letter to a Superintendent inquiring about a vacancy in a school you
      are interested in teaching in. Have it checked by a STEP faculty member
      before mailing.
   *2. A letter of application for a position you know is open. Have it checked
      by a STEP faculty member before mailing.
   *3. A paper in which you describe the steps or procedures you would use to
      obtain a teaching position using
         *a) UMD Placement office
         and one of these:
            b) A commercial placement agency.
            c) A State Department placement office
            d) A teacher organization placement service
            e) Your own initiative.

EVALUATION

Have you answered the INQUIRIES to your satisfaction?
Can you perform, either orally or in writing, as specified in the OBJECTIVES?
Can you discuss, either orally or in writing, the following concepts?
1. Initial certification requirements
2. Continuing Education requirements
3. Certificate renewal
4. Certificate revocation
5. Letter of inquiry
6. Letter of application
7. A tenure
8. Continuing Contract Law
9. Steps in seeking employment
10. Employment projections
11. Salary schedules
12. Contracts
13. School Board - teacher organization agreements

If so, go to the STEP office to take the written test in this SEEDPAC. This will
be followed by a check-up with a STEP faculty member to determine whether you
are through with the work of this SEEDPAC.
INRODUCTION:

In this SEEPAC, you will study a number of controversial issues in education. The number of such issues studied will be limited, but among those studied will be a couple of recent vintage and several that have been around a good number of years. You will be asked to look at both sides of the issue and then take a position on some. Some of the issues are:

Tenure for teachers
Merit pay
Sex education
Religion in the public schools
Pursuing to achieve racial balance
State and Federal Aid for Private schools
Accountability (Performance contracting, vouchers)
Control of the educational system

OBJECTIVES

Upon completion of this SEEDPAC you should be able to:

• In one or two sentences state what each of the issues listed above is
• take a position on each issue and defend your position--citing arguments and any research or examples of schools or communities that have adopted what you are proposing

INQUIRIES

1. What is meant by teacher tenure? From the teachers point of view, what are the advantages of having tenure? Are there any disadvantages for the teacher? From the school administrator's point of view, what are the advantages and disadvantages?

2. Should sex education be included in the school's program of studies? Why or why not? What is being included in the courses being proposed?

3. Should schools be integrated racially and socio-economically? Is busing the best way to achieve such an integration? If not, what other method can be used?

4. What have the courts said in regard to the teaching of religion in the public schools. What are some patterns or forms that religious instruction is taking today?

5. What have the courts said in regard to state and/or federal aid to parochial and private schools? What are the arguments for and against such aid?

6. Which is better--local, federal, or professional control of education? Why? Is some kind of combination of these three elements possible?

7. What is meant by performance contracting? by vouchers? What are the arguments for and against each? Should teachers be held accountable? If so, for what and how should it be done?

8. Is the concept of merit pay a workable concept?
LEARNING ACTIVITIES

A. READ

1. Allen and Seifman, *The Teacher's Handbook* (Sections 5.5, 7.10, 7.17, 5.2, 1.0, 9.7)
2. Reprint Package-Phase V-3. This is available in the STEP Office
3. Articles in recent journals that deal with these or other controversial issues.
4. Books that deal with these issues. Check the table of contents for those chapters that are appropriate. Some possible books include:

   - Graham, *The Public School in the New Society*
   - Cordasco, Hillson, Bullock, *The School in the Social Order*
   - Sturm, Palmer, *Democratic Legacy in Transition*
   - Smith, Kniker, *Myth and Reality*
   - Westby-Gibson, *Education in a Dynamic Society*

B. ATTEND

1. Small group seminars scheduled for this SEEDPAC. Watch the Phase V bulletin board for listings of such seminars—topic, time and place.
2. Any special events scheduled. See the Phase V bulletin board.

C. DO

1. Interview students, teachers, lay people, etc. on these items. Prepare your questions ahead. Keep the number small. Phrase them so that they elicit opinions.
2. Find newspaper or magazine clippings (letters to the editor, e.g.) that describe reactions to, or opinions about the issues in this SEEDPAC.
3. Vote telecasts, "Open mike", programs, etc. that deal with these issues.

D. WRITE

1. Summaries of articles or chapters read in A3 and A4.
2. A paper describing your reaction to C1, C2, and C3.

EVALUATION

- Have you answered the INQUIRIES to your satisfaction?
- Can you perform as specified in the OBJECTIVES?
- Your examination will be written. You will be asked to take a position on a minimum of four of the issues and defend your position. (The issues you will be asked to write on will be chosen by the examiner.)
- Be sure all written material is handed in 24 hours prior to taking your test.
- Check with the STEP office 3 days after taking the test to find out if a follow-up oral exam will be necessary.
**INTRODUCTION**

This is the last of six SEEDPACS on human relations (HR). In this one you are asked to make a personal assessment of yourself as a prospective teacher. This includes your perception of your role in helping pupils to achieve strong and positive self-concepts and other appropriate educational goals; your strengths and weaknesses which relate to that role; and a realistic assessment of your ability to develop and maintain satisfying interpersonal relationships.

**OBJECTIVES**

Upon completion of this SEEDPAC you will be able to:

1. Demonstrate ability to describe a personal philosophy of education.
2. Make an assessment of your strengths and weaknesses as a teacher.
3. Make an assessment of the nature of your interpersonal relationships.
4. Show self-awareness of personal characteristics.

**INQUIRIES**

1. Should all people be expected to engage in formal education? If so, why? If not, why not?
2. What characteristics should a high quality teacher possess?
3. How do I rate on each of the characteristics I listed for item 2?
4. What is an accurate description of the types of interpersonal relationships I currently maintain with others? In what ways is this relevant or not relevant to my work as a teacher?

**LEARNING ACTIVITIES** (* is basic, ** is supplemental)

(Most of the previous learning experiences in STEP, or other education courses, are relevant to your personal philosophy of education and the self-assessment of your role as a teacher. You may wish to review and/or extend your learning from previous SEEDPACS, school experiences, growth group sessions, etc. If you do not feel ready for the final evaluation, consult your STEP adviser for further suggestions.)

A. READ

**2. Any recent writings on purposes of education and role of the teacher, such as:

- Combs, Avila, Purkey, Helping Relationships
- Dillon, Personal Teaching
- Glasser, Schools Without Failure
- Greer, Rubinstein, Will the Real Teacher Please Stand Up?
- Knoblock, Goldstein, The Lonely Teacher
- Leonard, Education and Ecstasy
- Narcuse, An Essay on Liberation
- Martin, Harrison, Free to Learn
- Milholler & Florisha, From Skinner to Rogers
- Natalicio, Hereford, The Teacher as a Person
- Postman & Weingartner, The Soft Revolution
- Postman, Weingartner, Teaching as a Subversive Activity
- Rogers, Freedom to Learn
- Schwartz, Affirmative Education
B. LISTEN TO

** Cassette taped speeches by Dwight Allen, William Glasser, Carl Rogers, etc. (in the Learning Resources Center)

C. PARTICIPATE IN (* is required)

*1. The Developmental Guidance Experience (DGE) to be scheduled for this SEEDPAC. (Watch Phase V bulletin board for sign-up sheet)

*2. The demonstration job interview arranged for Phase V. (Watch bulletin board)

EVALUATION (* is required)

*1. Present acceptable statements on "The Real Purposes of Formal Education and the Role of the Teacher in Achieving Them" and on "My Strengths and Weaknesses As a Teacher." This may be done in writing (turn in to the STEP office), or orally in a personal interview with a faculty member (ask STEP office which faculty person) or recorded on cassette tape (use the LRC facilities if you wish) and turned in to the STEP office.

(The evaluator will not make judgements about your statements being right or wrong; good or bad; agreeable or disagreeable. Rather judgements will be made about the extent of your insight into the nature of formal education and the realism of your self assessment. In other words, don't try to make your statements fit some imaginary model; just be forthright and thorough in expressing yourself.)

*2. Take part in the experiences described in item C above.

*3. Try to find a person, or group of people, who are somewhat familiar with your relationships with your peers and/or pupils. (E.g. members of a growth group; people you worked with in micro-teaching; Phase IV team members or supervisors; people in a student teaching seminar; close friends; your STEP adviser.) Verbally describe to them your own perception of your personal relationships with peers and pupils. Invite feedback on whether their perception of you agrees with your self-perception.

Take your own evaluation of this. (You're welcome to discuss this experience with a Phase V instructor, or course, but not required to.)
The Simulated Job Interview

The primary purpose of the simulated (or"demonstration") job interview is to provide a practice exercise in coping with this type of situation before the real-life equivalent occurs. The emphasis should be on making the interview as realistic as possible. The major difference between the simulation and the real thing is that there will be several other students present to observe and learn from what they see.

A UND senior will be interviewed by a local school administrator, either "live" or on videotape. A set of Placement Office credentials will be available to the interviewer and the interview will approximate the 20-30 minutes normally allotted. The physical setting, type of dress, type of questions, etc. will all be as genuine as possible. Following the demonstration, there will be time for a general discussion of what has taken place.

The following information has been gleaned from suggestions of a number of people who regularly interview candidates for teaching positions.

PREPARATION FOR AN INTERVIEW

1. Be sure you know the correct time and place. Don't take this for granted. Plan to arrive a few minutes early in case the interviewer is a little ahead of schedule.

2. Get the full and correct name of the school district, check on its geographic location, and find out the name of the interviewer. Find out how to pronounce any names that appear difficult.

3. Bring a pen and some note paper in case you are asked to write down something. (You should also make a few notes immediately after you leave the interview.)

4. Your appearance should exemplify neatness and cleanliness. Dress as you would expect to dress for a day of teaching. Many interviewing rooms are small and stuffy so use after-shave lotion or perfume only sparingly; and wash hands afterward so that the scent will not transfer to the recruiter's hands.

5. Think about several questions that you can ask the interviewer, if given the chance. Be prepared to explain the particular attraction that the position has for you.

CONDUCT DURING THE INTERVIEW

1. Experienced interviewers expect and discount a certain amount of natural nervousness. It does help to dry a damp brow or clammy hand just before meeting your interviewer. Try to avoid doing things with your hands which make your nervousness too obvious.

2. Greet the interviewer by name, as you enter, and then take your cues from him or her. If the interviewer moves to shake hands, do so with a firm but moderate grip. Sit down when the interviewer does, or invites you to do so.

3. Don't chew gum or smoke during the interview.
4. You should come across as an alert, intelligent listener as well as a confident talker. This can be conveyed through posture, eye contact, hand movements, and other body language.

5. Let the interviewer structure the meeting. A few like to do most of the talking and judge your reactions. A few hardly speak at all and expect you to ask questions and sell yourself. The majority will pose a series of questions for you to answer. Responses should be more than "yes" or "no" but not overly long. If you find yourself talking too long, give the lead back by saying, "Perhaps you have some other questions to ask me?"

6. Make sure your good points get across but in a factual, sincere way rather than bloated with conceit. A good way is to mention them in connection with a concrete activity. (Example: "I paid for 75% of my college expenses" rather than "I'm really a hard worker.")

7. The greatest preventative against confused or contradictory answers is the plain, unembroidered truth. A frank answer, even if it seems a little unfavorable to you, is better than an exaggeration which may tangle you up in a later question. (Example: "Do you always pitch right in on a job and get things done on time?" "I must admit I haven't gotten assignments in on time in all cases, but I never turned in a major assignment or term paper late except once by prior arrangement. I'm sure my supervisors in those two part-time jobs I listed on my references will tell you they were satisfied with my promptness and thoroughness.")

8. Never make a slighting reference about a former employer or teacher. If something went wrong, suggest that at least some of the blame must have been your own.

9. Conduct yourself as if you are determined to get the job you are discussing. The interviewer is aware that you may have other irons in the fire but will want to think that you really do want this particular position. Don't give the impression that you are just shopping around and are unsure of what you really want to do.

10. Watch for a chance to ask some definite questions about the position and the school district and to mention the main reasons the position appeals to you. Too many such questions may imply that you are afraid of work or overly hesitant about joining the school or community, however.

11. If you get the impression that you've already been rejected or that the interviewer is just going through the motions, don't show your discouragement. You have nothing to lose by continuing the appearance of confidence and determination. Once in a great while, an interviewer may even seem to discourage you in order to test your reactions.

12. In rare instances, an interviewer may be so impressed that a job offer is made on the spot. If you are absolutely sure it is the one you want, accept it with a definite "yes". Otherwise, tactfully ask for a short time to think it over and set a definite date when you will provide an answer. Above all, don't create the impression that you are delaying in order to check out another possibility. The interviewer doesn't want his offer to be your second choice.
13. Interviewers will usually indicate when your time is up. They often operate on a tight schedule. When you get the signal, don't linger and create an uncomfortable situation. Be certain to thank the interviewer for his time and consideration of you. Smile, and show as much confidence in leaving as you did in arriving. Your parting words can reinforce the impression of interest in the position. (Example: "If you have any other questions or if there is anything you want me to do, I hope you will get in touch with me.")

EXAMPLES OF FREQUENTLY ASKED INTERVIEW QUESTIONS

1. What are your future professional plans?
2. In what school activities have you participated? Why? Which did you enjoy the most?
3. How do you spend your spare time? What are your hobbies?
4. In what type of position are you most interested?
5. Why do you think you might like to work for our school?
6. What jobs or part time jobs have you held? How were they obtained and why did you leave?
7. What courses did you like best? Least? Why?
8. Why did you choose your particular field or major?
9. What percentage of your college expenses did you earn? How?
10. How did you spend your vacations while in school?
11. What do you know about our school district?
12. Do you feel that you have received a good general training?
13. What qualifications do you have that make you feel that you will be successful in your field?
14. What extracurricular offices have you held?
15. What experience have you had with people from different races or cultural backgrounds?
16. If you were starting college all over again, what courses would you take?
17. Do you prefer any specific geographic location? Why?
18. Are you married? Have marriage plans?
19. Why did you decide to go to this particular college?
20. How did you rank in your graduating class in high school? Where will you probably rank in college?
21. Do you think that your extracurricular activities were worth the time you devoted to them? Why?
22. What do you think determines a person's progress in the teaching profession?
23. What personal characteristics are necessary for success in your chosen field?
24. Tell me about your home life during the time you were growing up.
25. Are you looking for a permanent or temporary job?
26. Do you prefer working with others or by yourself?
27. Who are your best friends?
28. What kind of boss do you prefer?
29. Are you primarily interested in making money or do you feel that service to your fellow men is a satisfactory accomplishment?
30. Can you take instructions without feeling upset?
31. Tell me a story!
32. Do you live with your parents? Which of your parents has had the most profound influence on you?
33. How did previous employers treat you?
34. What have you learned from some of the jobs you have held?
35. Can you get recommendations from previous employers?
36. What was your record in military service?
37. Have you ever changed your major field of interest while in college? Why?
38. When did you choose your college major?
39. How do your college grades after military service compare with those previously earned?
40. Do you feel you have done the best scholastic work of which you are capable?
41. How did you happen to go to college?
42. What do you know about opportunities in the field in which you are trained?
43. How long do you expect to work?
44. Have you ever had any difficulty getting along with fellow students and faculty?
45. Which of your college years was the most difficult?
46. What is the source of your spending money?
47. Do you own any life insurance?
48. Have you saved any money?
49. Do you have any debts?
50. How old were you when you became self-supporting?
51. Do you attend church?
52. Did you enjoy your four years at this university?
53. Do you like routine work?
54. Do you like regular hours?
55. What size city do you prefer?
56. When did you first contribute to family income?
57. What is your major weakness?
58. Define cooperation!
59. Will you fight to get ahead?
60. Do you demand attention?
61. Do you have an analytical mind?
62. Are you eager to please?
63. What do you do to keep in good physical condition?
64. How do you usually spend Sunday or vacations?
65. Have you had any serious illness or injury?
66. What job in our school would you choose if you were entirely free to do so?
67. Have you plans for graduate work?
68. What types of people seem to rub you the wrong way?
69. Do you enjoy sports as a participant? As an observer?
70. Have you ever tutored an underclassman?
71. What jobs have you enjoyed the most? The least? Why?
72. Would you prefer a large or a small school? Why?
73. Do you like to travel?
74. What are the disadvantages of your chosen field?
75. Do you think that grades should be considered by employers? Why or why not?
76. If married, how often do you entertain at home?
77. To what extent do you use liquor?
78. What have you done which shows initiative and willingness to work?
79. What is the most interesting thing you have done the past year?
FOLLOWING THE INTERVIEW

1. If the interviewer has suggested further contact, be sure to make a written reminder for yourself and follow his instructions exactly.

2. A thank you letter is ordinarily superfluous. If the interviewer indicated that you would hear from the school district, or seemed truly interested in your application, wait an appropriate time period and then send a brief note to remind the interviewer of your talk and your continuing interest.

3. Additional unrequested correspondence is probably a waste of time. In these days of surplus teacher supply, and scarce funds, many schools are so swamped with applications that they can no longer send notices to everyone after a vacancy has been filled. Be understanding of this and resist the temptation to criticize the district or its personnel in ways that might possibly hurt your chances for future opportunities.

If you wish to discuss these or other matters connected with obtaining a position, there are several sources of help and advice: your STEP adviser, the director of the UMD Placement Office, printed materials about interviewing and job applications (available from the Placement Office), discussions with experienced teachers and school administrators, and various library readings. You may also wish to introduce the topic for discussion at a Phase V group meeting.
APPENDIX C
This questionnaire contains items which describe various aspects of the secondary education program in summer school 1973. The purpose of the questionnaire is to find out the satisfactions and dissatisfactions you may have experienced. This questionnaire is intended as an evaluation of the program approach in its entirety. Hence, in answering this questionnaire, please respond in terms of your reactions to the entire program experience during summer school 1973.

Please be sure to record your name and file number on the upper right corner of this page. All responses will be confidential and only summary data will be presented to secondary education. We do, however, need your file number to match this questionnaire with other questionnaires you have completed.

Please read each statement carefully. Then decide how satisfied you are with that aspect of the program described in the statement. Respond by circling the number which is the most accurate description of the way you feel about your program experiences in summer school. Use the following key to indicate your response:

Circle "1" if you are NOT SATISFIED
Circle "2" if you are NEITHER SATISFIED NOR DISSATISFIED
Circle "3" if you are SATISFIED
Circle "4" if you are SOMEWHAT SATISFIED
Circle "5" if you are VERY SATISFIED

If the item is NOT RELEVANT to your experiences, please leave the item blank.
1. The off-campus experiences which were part of your program.  
2. The amount of work that was required in the program.  
3. The overall competence of the teachers in the program.  
4. The way in which grades were determined.  
5. The way you were rewarded for working hard.  
6. The amount of attention you received from program teachers.  
7. The overall organization of the programs.  
8. The way advisors helped you develop program plans.  
9. The chance to take courses which fulfill requirements/obligations.  
10. The chance to work on projects which interested you.  
11. The chance to have experiences which contributed to your personal growth.  
12. The help you received in trying to attain your program goals.  
13. The concern program teachers had for students' needs and interests.  
14. The chance to register for the courses you wanted.  
15. The difficulty level of the courses you took.  
16. The chance to become acquainted with other people.  
17. The availability of program advisors.  
18. The overall quality of the education you received in the program.  
19. The chance you had to develop your skills.  
20. The quality of the materials used in the courses.  
21. The amount of new information or knowledge you received.  
22. The chance to meet people who were different from you.  
23. The opportunities you had to determine your own pattern of development.  

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<th>Dissatisfied</th>
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* Percentages do not total 100 because some items did not apply to each respondent.
24. The interaction with other program members.
25. The on-campus experiences which were part of your program.
26. The way in which books and other written materials were used in the program.
27. The extent to which the program encouraged you to develop your creative abilities.
28. The way in which student responsibilities were defined in the courses.
29. The absence of the typical classroom lecture format.
30. The freedom that was present in the program.
31. The variety of offered programs.
32. The way in which the program was publicized.
33. The cost of enrolling in the program relative to the benefits.
34. The overall experience in the summer school program as compared with past summer sessions.
35. The extent to which the program met your educational/vocational needs.
36. The general impact which program experiences had on you.
37. The way in which the programs operated.
38. The attitudes of program teachers to students.
39. The encouragement you found in exploring new areas of study.
40. The content of seminars which you may have attended.
41. The quality of seminars which you may have attended.
42. The length of the past program experiences.
43. The general concept of individualized experiences.
44. The organization of individual experiences into a programs context.
45. The amount of time you had to spend to earn the credits.
46. The amount of time you had to plan out your program experiences.
47. The extent to which community resources were used.
48. The unconventional nature of the program learning experiences.

49. How valuable was summer school in helping you to become a better teacher?
   Of little value ______
   Somewhat valuable ______
   Valuable ______
   Extremely valuable ______

Thank you for your continued cooperation. We do appreciate your taking time to complete this questionnaire.

--Measurement Services Center