This paper contains six essays concerning the relationship between teacher education and the learning process. The first discusses various teacher training strategies at the university/college level and in inservice workshops. The second states that teachers should be freed from classroom chores to spend more time on curriculum development and team planning. The third essay focuses on utilizing environmental resource facilities in effective and cognitive learning processes. The fourth essay states that the formalized learning process consists of those activities related to the competencies of instruction and learning, and those that enhance and reinforce affective, cognitive, and motor skills development. It goes on to say that teachers must be trained in all these activities. The next essay discusses the teacher and curriculum instruction. It states that teacher trainees and experienced teachers must become involved in building school programs in order to develop the necessary skills and understandings related to this process. The final essay deals with the roles of the classroom teacher, and emphasizes that teacher training institutions have a responsibility to show their students all the ways these roles might be needed in a classroom situation. (RC)
ESSAYS ON THE NATURE AND STRUCTURE OF TEACHER EDUCATION IN AMERICA

AS RELATED TO THE LEARNING PROCESS

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ABOUT THE AUTHOR

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He received his Bachelor of Science in Education and Masters of Education degrees from the University of Maine, Orono. The Doctor of Education degree was granted by the University of Rochester, New York, in 1971.

Dr. Peters has worked as a curriculum researcher for an ESRA Title III inner city program; has been a Kindergarten through grade twelve curriculum coordinator; has been a department chairman; has been curriculum consultant to several innovative programs; has been an educational consultant to a Model Cities Education Task Force; has conducted curriculum change projects at the Florida State University laboratory school; has supervised students/teachers at the University of Rochester; has founded Educational Research Associates and as Projects Director was directly involved in classroom research, the development of instructional materials such as a classroom simulation and an Inquiry Into Economics film series geared to grades 4-6, and a study of social studies programs - K-12; and has been director of the Union 58 ES project since its inception in July 1973.
Dr. Peters has written several published articles; has developed curriculum guide and resource guide materials for several ERIC clearinghouses; has been inducted into Delta Tau Kappa (Florida State University) and Alpha Kappa Delta (University of Southern California); has been a past member of the Instructional Media Advisory Committee of the National Council for the Social Studies; has received a Merit Award from the National Council for Geographic Education; and is currently a member of the Curriculum Committee of the National Council for the Social Studies.

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TODAY, the training of American teachers can be grouped into two separate but integrated strategies of intellectual and skills development enrichment; namely, college/university courses and in-service workshops.

COLLEGE/UNIVERSITY COURSES.

In recent years, colleges and universities have developed teacher training programs and graduate courses which are more relevant to the needs of neophytes and veterans of the profession. With the advent of in-service training/enrichment programs and state accredited commercial workshop programs, institutions of higher learning have been, of necessity, made aware of the need for them to directly involve their faculties with practicing teachers and to expose themselves to the day-to-day happenings of the classroom.

In New Hampshire, the State Education Department, Concord, has introduced a program of in-service staff development which becomes effective in September 1975. To summarize the proposal, school supervisory unions will be delegated the responsibility of teacher recertification: Each system must create a five year staff development plan—which must be approved by the state. Each staff development committee can incorporate several enrichment strategies into its five year plan. This local system license to recertify professional educators puts colleges and universities into direct competition with workshop programs and commercial organizations for the attention and financial support of teachers.
IN-SERVICE WORKSHOPS.

"Within the past decade, the quality and orientation of teacher in-service education workshops has changed for the better. Until the mid-1960's, workshop agendas and presentations were generally prepared by administrators - without concern for the interests and needs of teachers. The result - a well developed workshop program on paper but ineffectual and lacking participant enthusiasm.

With the advent of Title III projects, a greater attention was paid to the development of in-service workshop programs which not only exposed teachers to innovations but captured the urgency of their day-to-day classroom needs.

The purpose of any in-service workshop program is three-fold:

1. the educational enrichment of teachers, supervisors, curriculum specialists, and administrators.
2. recertification credit.
3. direct teacher involvement in the decision-making process of the school system.

The success of any workshop program is dependent upon the degree to which it directly involves the classroom teacher and meets his immediate - as well as long range needs and interests."¹

The advantages of in-service enrichment programs are several.

1. Locally developed in-service programs usually involve classroom teachers in goals/objectives development and program planning. Thus, these programs are attuned to the real needs and concerns of classroom teachers.

2. Local school systems can assess the needs of their staffs more readily than can institutions of higher learning which are physically removed from the classroom setting. Thus, in-service programs can be developed which meet immediate needs.

3. Commercial workshops must be attuned to the needs of systems - if they are to successfully compete for financial support. Thus, these firms can enlist the talents of well-known specialists and experts in attempts to help educators improve their instruction.

4. The philosophical basis of in-service workshops has a dual character; immediacy and relevancy. Thus, programs are developed which meet specific needs and can be conducted at a point-in-time when most advantageous to the learning process of teachers and students.

The key to the success of teacher training programs is proximity: that is, the degree (in spacial relationship and hours) of direct trainee contact with the real world of the classroom. Aspiring teacher trainees cannot be isolated from school classrooms until the student teaching ordeal of the junior or senior year. College students should be exposed to aspects of classroom teaching very early in career preparation - specifically during the freshman and sophomore years.

In the early 1960's, the Florida State University, Tallahassee, experimented with using the FSU laboratory school as a pre-student teacher assignment training center. During the junior year, students in social studies education were assigned to lab school classes for 'bit' teaching experiences. Following the concept of micro-teaching developed by Dwight Allen at Stanford University, the usual 'bit' teaching tour-of-duty averaged about ten weeks and these
classroom experiences were related to campus oriented pre-student teaching seminars. During the ten weeks of residence at the lab school, each student was exposed to and experienced nearly every aspect of daily teaching chores. Thus, each student was able to develop an awareness of the totality of the teaching process prior to being assigned to a school for senior year practice teaching. This exposure prepares the individual for the final pre-teaching test; student teaching.
Traditionally, the school day has been viewed by school boards, school administrators, teachers, students, and parents - as well as the general community - as five to seven hours of direct teacher-pupil contact time; contact time primarily restricted to the classroom. Although, with the gain in popularity and increased use of field trips, student walk-throughs, and nature hikes, direct teacher-pupil contact time has been extended outward from the classroom to include the out-of-doors and community resource sites.

With the advent of experimental education projects (e.g., Title III and National Institute of Education), an emphasis has been placed on teacher involvement in curriculum development and team teaching/planning. Thus, with the 'call' for direct teacher involvement in the creation and implementation of instructional programs, the 'school day' concept has taken on a new meaning.

No longer can the 'school day' be perceived and defined as classroom-related teacher-pupil contact time. The increased services expected from teachers (regarding lesson planning and program development) requires that teachers be freed during the school day hours to meet, discuss, and plan activities.

There are several ways by which certified teachers can be released from teaching activities to become involved in program development and in-service training.

1. The hiring of certified teacher aids (degree graduates) or the creation of a pool of certified 'short duty' substitute teachers.
2. Modular scheduling.
3. Early student dismissal in the afternoon.
4. Planning and in-service meetings scheduled prior to the start of school in the morning.

One thing is certain. Teacher's meetings and in-service programs cannot be scheduled for after-school hours late in the afternoon -- and hope to be highly successful and rewarding experiences for those involved. Teaching is a psychologically draining, if not physically exhausting, job: A teacher who spends a full day in the classroom cannot be expected to be energetic and enthusiastic about after-school activities that require their attention and alertness until five or six in the afternoon.

Teacher training programs must be so geared and oriented so as to prepare teachers who perceive the newly emerging concept of the school day. No longer can teachers be trained and prepared for the teacher-pupil contact stereotype of the past. Thus, the burden of responsibility is upon colleges and universities to develop an awareness of the nature and roles of teaching -- in the 1970's.
THE UTILIZATION OF ENVIRONMENTAL RESOURCE FACILITIES
IN AFFECTIVE AND COGNITIVE LEARNING PROCESSES

RICHARD O. PETERS, ED.D.

With the current emphasis on environmental and vocational (on-the-job training) education, there is a need to look anew at the world outside the confines of the school; specifically, the "natural and social"¹ environmental phenomena found within any given geographical area.

Those new to the teaching profession, as well as veterans of the classroom, should develop both an awareness of and sensitivity for those natural and social (man-made) elements of a given life-space region which can be used as affective, cognitive, and/or psychomotor oriented² learning and enrichment sites.

Ideally, an environmental education program brings attention to the totality of MAN's daily life. This totality includes those environmental phenomena which effect and influence the attitudes, habits, cognitive learning, and values of each and every student.

Vocational education programs which emphasize on-the-job training can capitalize upon a rich resource of available community facilities. For those schools that cannot duplicate the facilities and human resources of social enterprises (e.g.; manufacturing plants, retail stores, hospitals, banks, libraries), an awareness of existing facilities is the first step to be taken in locating students at these worksites.

² Taxonomical domains are explained in Bloom and Krathwohl's TAXONOMY OF EDUCATIONAL OBJECTIVES—HANDBOOK I: COGNITIVE DOMAIN and HANDBOOK II: AFFECTIVE DOMAIN, David McKay Company New York, 1956 and 1964.
Natural and social environmental phenomena can be related to each and every academic and enrichment aspect of the instructional curriculum. For example, natural phenomena (e.g., forests, lakes, mountains, and rivers) lend themselves to biologically-oriented science studies, social studies-oriented geography map work, and mathematics-oriented surveying. Social phenomena (e.g., buildings, commercial enterprises, libraries and museums, recreational facilities, and service agencies) can be utilized in aesthetically/architecturally-oriented art and music classes, social studies-oriented anthropology and sociology classes, economics classes, language arts, mathematics, etc.

There are several ways by which teacher training institutions and in-service programs can expose educators to environmental phenomena and broaden their awareness of existing facilities:

1. Field trip tours to local natural and social environmental settings - and resource facilities.
2. Vicarious exposure to life-space phenomena via films, slides, and/or video tapes.
3. Daytrip and overnight training sessions held at natural sites.
5. Environmental phenomena-oriented resource people visit classrooms and teacher training classes to discuss site characteristics and to elaborate upon existing levels-of-cognition.

Once the natural and social phenomena of a given area have been identified, there is a need to characterize and describe the instructional value of individual sites. This
cataloging of site phenomena can be compiled into a resource document and distributed to classroom teachers.

In 1968, the ESEA Title III Operation EPIC project; Experimental Program In Curriculu, Portland, Maine, developed a success-oriented instructional program for students in grades 7-9. Student awareness of and exposure to community environmental phenomena was an important aspect of the program's philosophy of learning of students. During the 1968-1969 academic year, 108 community resource sites were identified and visited in the Greater Portland area. Each site identified and toured was cataloged for teacher use. Prior to a student tour, the site was visited by EPIC personnel and descriptive data collected. In turn, a site description was developed and the instructional value of the facility was related to each academic area of the curriculum.

Field trips expose students to real-life situations and to the day-to-day experiences of community members. The wide variety of natural and social phenomena existant outside the school can be skillfully utilized to expand and enrich the learning resources, physical plant facilities, and instructional programs of a given school.

In order to maximize the instructional value of a given site, the teacher must be made aware of both its existence and character. This awareness can only come about as a result of a conscious, well-organized, and planned program of exposure and experience.
In the final analysis, all formalized instructional systems and pedagogical strategies can be reduced to a common denominator - personal interactions.

There are several aesthetic and personality qualities which directly affect and enhance the learning process; student and teacher philosophies of education, the socio-economic backgrounds of students and teachers, the professional preparation of teachers, student preparation in various academic areas, student and teacher abilities and skills, and the classroom atmosphere as well as organization.

The learning process consists of two interrelated phenomena; what I refer to as primary and secondary cells. These identifiable cells interact constantly to form honey-combed complexes. While primary cells are directly related to the competencies of instruction and learning, other cells perform secondary functions that enhance and reinforce affective, cognitive, and motor skills development.

**PRIMARY LEARNING CELLS.**

The environment of the Primary Learning Cell (PIC) consists of the day-to-day interactions of students and teachers as well as students and students within the confines of the self-contained or open classroom.
Primary learning cell interaction(s) can occur in a multiplicity of instructional settings: the educational generalist or specialist in a self-contained classroom, a battery of intra- or inter-disciplinary specialists in a team teaching situation, or academic and aesthetic-oriented enrichment teachers in large group, small group, or individualized instruction structures.

Sensitivity, the keystone in the hierarchy of interpersonal relationships, determines the degree of success of Primary Learning Cell activities. Students and teachers alike must cultivate a sense of empathy for the 'humaness' of the
other SELF. Mutual sensitivity can result only if-and-when students and teachers discover and learn together; when they share common goals, inquire cooperatively, and respect the dignity and worth of one another.

SECONDARY LEARNING CELLS.

There are several devices and qualities which can directly and indirectly effect and influence the learning process. Among these phenomena are instructional hardware and software, financial resources, educational philosophies, community and interest group support, and physical plant facilities.

1. Instructional Media Cells. A variety of audiovisual media hardware and software devices can be utilized to affect and enrich the learning process which takes place in the Primary Learning Cell(s).

INSTRUCTIONAL MEDIA CELLS MODEL

Media hardware and software devices serve the function of availability. The prime value of Instructional Media Cell devices lies in their accessibility for utilization by students.
and teachers when most advantageous to the processes of inquiry and skills development.

Careful consideration must be given to the unique characteristics of each IMC device when attempting to identify and utilize media hardware and software. Film, for example, can have a marked effect on learning while, at the same time, other devices and techniques affect no measurable change in student behavior or cognitive enrichment.

Research studies indicate that films bring learners into direct contact with objectives of real life and produce impressions of direct experiences. Knowlton and Tilton found that films have a marked effect on student retention of knowledge of factual material. The inclusion of color and natural sounds provide a close approach to subjective reality in a vicarious situation. Studies conducted in 1933 indicated that the use of films, as an integral part of classroom instruction procedures, affect more permanent learning of factual information and more permanent mental reactions of a thought variety than do methods of instruction in which nonvisual material is predominantly used or in which there is unorganized use of other visual aids.1

The concept of individualized instruction and its application to the learning process requires that students be prepared to critically evaluate and utilize instructional hardware and software.

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devices on an independent study basis. The individual student must be properly prepared so as to apply and utilize instructional media discriminately: that is, when most advantageous for maximum individual growth and development. In order to properly prepare students, it is necessary that teachers themselves be prepared in PRIMARY and SECONDARY cell skills.

2. Organizational Cells. These structural secondary cellular components encourage and enhance the stated and implied objectives of the learning process. Secondary Organizational Cell phenomena singularly and collectively effect the operationalization of the Primary Learning Cell(s) and the utilization of Secondary Instructional Media Cell devices.

ORGANIZATIONAL CELLS MODEL

Working collectively, teachers, administrators, and service specialists can affect primary and secondary learning cell functions and structure. Elementary and secondary grade teachers and service specialists interact directly with students while administrators, school boards, and community groups support and reinforce the basic tenants of the learning.
process: 1) the socialization of the individual, 2) individual intellectual and physical development, 3) maintenance of the folkways and mores of the community, and 4) the cultural enrichment of the individual.

In order to develop a meaningful learning process it becomes the responsibility of classroom teachers, curriculum specialists, media consultants, and administrators to critically evaluate and select primary and secondary instructional cell components which best serve the stated and implied objectives of the educational system, in general, the course of study, in particular. In one instance, a combination of self-contained instructional cells, text book-oriented secondary media cells, and an administrator-oriented structure may function best whereas in another setting interdisciplinary team teaching instructional cells, multi-media secondary cells, and a principal-teacher oriented administrative structure may be deemed most advantageous and desirable. In short, there is no single best organizational structure and/or instructional process which meets all the needs of all educational systems and students all of the time.

Educators must become aware of the role(s) of media and organization in the totality of the learning process. They must become better acquainted with the function and educational consequences of structure and hardware/software. They must begin to experiment with and evaluate a variety of techniques and structures in order to construct the best program of instruction in a given setting. Thus, the task is clear. Teacher preparatory programs and in-service programs must prepare aspiring teacher trainees and veterans of the classroom in primary and
secondary cell skills development.
THE TEACHER AND CURRICULUM/INSTRUCTION

RICHARD O. PETERS, ED.D.

While teacher preparatory programs and in-service workshop programs concentrate on skills development in general methods and specific academic "disciplines-of-knowledge," instruction for purposes of 'producing' qualified classroom teachers, attention should also be paid to direct teacher awareness of and involvement with curriculum planning, development, and implementation.

What is curriculum? What is instruction? How are they alike? How are they different? How do they separately and collectively effect learning?

1. Curriculum. Simply defined, curriculum is the educational blueprint, the organizational structure, for the day-to-day learning experiences of students and teachers.

2. Instruction. The instructional process is primarily oriented toward pedagogical strategies and materials that can be employed to enhance learning both in-and-out of the classroom.

3. Both curriculum and instruction are directly related to learning enrichment and skills development. To differing degrees of emphasis and concentration of efforts and time, both instructional properties address themselves to the question of structure and sequence, that is, the organizational and developmental character of the Learning process from Kindergarten through grade twelve.

4. While curriculum emphasizes the organization of disciplines-of-knowledge and enrichment activities, instruction is a refinement of the organizational structure—in a given course-of-study, with emphasis on plan book organization, materials acquisition, teacher-made and standardized testing, teaching aid devices, and instructional strategies.

5. Curriculum and instruction compliment one another. Neither property can exist and properly function without the continued support and existence of the other. Instruction is part of curriculum and curriculum is a composite of several instructional strategies and courses-of-study.

The affective, cognitive, and psycho-motor skills development processes of a given school are incorporated into a multi-grade curriculum. The strategies and materials employed by classroom teachers, to affect skills development, constitute the process of instruction. Combined, the properties of curriculum and instruction constitute the typical American educational system. This combination is exemplified in a typical K-6/7-8/9-12, K-6/7-9/10-12, or K-4/5-8/9-12 organizational structure.

There is no escaping the fact that, today, more and more school systems are expecting their teachers to become directly involved in and knowledgeable about curriculum planning and development. No longer is the classroom teacher perceived simply as a disseminator of information that is to be found in primary and secondary sources. Thus, college/university preparatory programs and in-service workshop programs must provide opportunities for teacher trainees and seasoned classroom veterans to gain exposure to and direct experience.
with curriculum planning and development.

There are several source materials that can form the basis of either a college/university or in-service workshop level curriculum exploration 'course'. To mention but a few:


Direct teacher involvement in curriculum planning and development accomplishes several important educational objectives as related to teacher pre-service and in-service education.

As a result of direct involvement with curriculum planning and development, classroom teachers and student trainees will:

1. gain experience in preparing curricula.
2. develop an awareness of the importance of curriculum development in the education process.
3. understand the nature and structure of curriculum as an education blueprint for action and goals accomplishment.
4. perceive the relationship(s) between curriculum and instruction.
5. develop a keen awareness and understanding of the need for clearly defined and stated goals and objectives.
6. better understand the relationship(s) between a particular academic discipline-of-knowledge or course-of-study and the total school curriculum; the basis for role clarification within the educational structure of a given school or system.
THE MANY ROLES OF THE CLASSROOM TEACHER

RICHARD O. PETERS, ED. D.

In the course of a given school day, both the elementary and secondary classroom teacher wears many hats and plays many roles.

It no longer suffices to perceive the classroom teacher solely as a 1) disciplinarian, 2) disseminator of information, 3) guardian of knowledge and wisdom, 4) collector of lunch and milk money, 5) playground babysitter, or 6) class advisor. The gravity and nature of our times has caught up with our simplistic, societal concept model of the teacher as 'keeper-of-the-kids'.

The mental of our national attitude and character has been hardened on the anvil of World War II, the Korean conflict, the threat of the A-bomb, the Cold War, the Dallas assassination of November 22, 1963; the untimely deaths of Martin Luther King and Robert Kennedy, the Viet Nam crisis, inflation and recession, the rise of the drug culture, and lastly - the Watergate affair with the resulting resignation of Richard M. Nixon. Thus, our naivete has been replaced with a more-realistic, sometimes cynical, outlook regarding the battle for day-to-day happiness and well-being. As alluded to by Nierenberg and Calero¹, our discussion of the concerns for and issues confronting the state of the nation can no longer be clouded by confusing, ambiguous catch phrases, misleading gestures, and trite/outdated cliches.

Now, as never before, formal education is viewed by the nation as one of the granite pillars of our established system. It is now realized the awareness and knowledge are two of the most important sentinels which guard us against deceit, oppression, and tyrannical power. Each of us must be totally prepared to take an active and intelligent role in the affairs of the nation. Our educational system can help - by exposing students to and preparing them for life in the three taxonomies; the affective, cognitive, and psycho-motor domains.

In order to affect the attitudes, values, and skills development of students - as well as provide for their cognitive enrichment, the American classroom teacher must:

1. be prepared to function in each of the three domains of Bloom and Krathwohl's taxonomy of educational objectives.
2. have gained practical experience in working with students in each domain, and...
3. possess an attitudinal frame-of-reference and personality which encourages an atmosphere of 'openness' in the classroom that results in a mutual teacher/student quest for knowledge and reason.

How can we accomplish the psychological transformation of the character of the American teacher in the minds of teachers, students, parents, school boards, and the American society? What are the many roles of the typical American classroom teacher?

One important way by which the conceptual perception of the American teacher can be changed is direct contact. Contact results in exposure and the development of an awareness of the complex tasks performed by the classroom teacher during any
given day. How can this degree of contact be accomplished?

1. Open House and National Education Week activities.

2. The organization of parents and teachers into P.T.A, P.T.O., etc.

3. Introduction of community members into the classroom as teacher aids or helpers.

4. Introduction of community members into the classroom as resource people, guest speakers, etc.

5. Film, slide, and/or video tape presentations of classroom activities made to community groups, social clubs, and service agencies.

6. Mass media campaigns – to draw public attention to the accomplishments of the classroom and educational programs – suing newspapers, radio, television, posters, community group presentations, open house, etc.

ROLES. Teacher trainees must be made aware of the fact that during the course of an academic year the average American classroom teacher functions in many interrelated roles.

The typical classroom teacher is...

1. an attitudinal, behavioral, and values exemplary model for students.

2. an information resource person.

3. a guider of student inquiry and learning.

4. a confidant to students.

5. an 'expert' in a given discipline-of-knowledge.

6. a substitute parent.

7. a guardian of the community social standards.

8. an appraisor of progress and evaluator of student behavior and academic performance.

9. a program planner.

10. a tutor.

11. a disciplinarian.
12. a group leader.
13. an initiator of learning.
14. a friend.
15. a record/grade keeper.
16. a playground supervisor.
17. a first aid expert.
18. a mender of broken hearts and dreams.
19. a guidance counselor.
20. a consultant to parents.

During the course of a day, a week, a month - a total school year, the average classroom teacher is called upon to play each role enumerated. The teacher trainee must be made aware of this fact before he enters the profession. Developing an awareness of these roles while on-the-job is the wrong time for discovery. The trainee must be exposed to the routines of classroom teaching before he signs his first teaching contract. Thus, the teacher training institutions have a responsibility to expose their students to the facts-of-life, as related to classroom teaching, during the course of their undergraduate studies.