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**ABSTRACT**

A collection of seven essays about current topics involving social studies curriculum is presented in this document. "Priorities in the Social Studies" considers curriculum-related issues and social problems that need to be addressed. "The Student and the Psychology of Learning" suggests criteria that should be considered by teachers when selecting learning activities, while "Teaching History in the Social Studies" advocates that history teachers implement selected educational philosophies. "Multicultural Education and the Middle East" describes this area's geography and history, and "Criteria To Emphasize in Unit Teaching" discusses teaching standards in terms of selected educational theories. Comparisons of teaching methods are explored in "Subject Centered Versus an Activity Centered Curriculum," while the importance of developing realistic experiences for students is emphasized in "Simulations and the Curriculum." Some of the essays include bibliographies. (JHP)

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THE SOCIAL SCIENCE CURRICULUM  
(A Collection of Essays)

by

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## PRIORITIES IN THE SOCIAL STUDIES

There are numerous articles and textbooks written on improving the teaching of the social studies. Thus, many issues are in evidence in objectives, learning activities, subject matter, and appraisal procedures in the social studies area.

This paper will examine issues and recommendations in social studies teaching.

### Analyzing Recommendations in Teaching the Social Studies

An increased number of states mandate the use of precise objectives in teaching. Thus, on the local school system level, measurably stated objectives are identified by social studies teachers and supervisors. Students are to attain these ends as a result of teaching. The school district also develops tests for students to take to reveal if the specific objectives have been achieved. Observable results are then secured from students. Basically, slow, average, and fast learners can attain the same objectives. However, slower students need more assistance to achieve goals.

Behaviorism, as a psychology of learning, is involved in social studies teachers selecting measurable objectives for students to achieve.

There are selected criticisms of behaviorism and its use in the social studies. Students have their own desired goals to achieve. These goals may emphasize questions which learners raise in ongoing units and study. Students then desire to discuss answers to purposeful questions and problems. Objectives developed prior to instruction, such as in behaviorism, omit the concept of student-teacher planning.

Secondly, the order of emphasizing the precise objectives in teaching is determined by the social studies teacher. There are selected educators who believe that sequence resides within the student and not in predetermined measurably stated objectives. It is the student then who needs to be involved in determining the order of objectives.

Thirdly, precise objectives selected for student attainment may emphasize trivia. Critical and creative thinking, as well as problem solving are difficult goals to state in precise terms. Thus, higher levels of thinking are omitted from the social studies curriculum.

Advocates of specific objectives favor clarity of ends to stress in teaching. With measurably stated objectives, there is little or no disagreement in meaning of what students are to learn. Clearly stated objectives are salient to a behaviorist, otherwise vagueness exists in stating content that students are to attain.

Furthermore, if subject matter is carefully identified prior to instruction, trivia will be avoided as to content for learners to acquire. Careful consideration needs to be given to subject matter selected for students to acquire. The subject matter chosen by social studies teachers and supervisors needs

to be incorporated into the specific objectives to be emphasized in the curriculum.

An adequate number of objectives needs to be in the offering for pupils so that success in achievement is enhanced. If students experience difficulties between achieving objectives one and two, additional ends can be placed between these two goals of instruction.

Behaviorists believe it is easier to select learning activities if the objectives are stated in a precise, specific manner. The learning activities chosen, be it reading and/or audio-visual aids, should help students to attain one or more specific objectives. It might be that a single filmstrip, properly introduced to students, guides students to achieve one objective. At other times a single learning activity will guide students to attain two or more objectives.

Behaviorists also advocate that evaluation procedures can be highly reliable if the appraisal procedures utilized measures learner progress against the stated objective. The concept of reliability is highly significant when thinking of methods of evaluating student progress in the social studies.

An eclectic approach in teaching social studies would emphasize using both measurably stated, as well as general objectives that are more open ended in ongoing lessons and units of instruction.

A second issue in teaching social studies emphasizes a state mandated versus a locally developed curriculum. Diverse states have definitely become increasingly involved in determining criteria for local school districts to follow. Selected states mandate the use of measurably stated objectives for schools to follow. Other states permit local districts to decide upon the use or nonuse of measurably stated objectives. If measurably stated objectives are stressed, then mastery learning, instructional management systems (IMS), or criterion referenced testing (CRT) is emphasized in teaching and learning situations.

Further issues in a state mandated social studies curriculum stresses the selection of subject matter to be taught to students. A state might then have subject matter specialists in the academic disciplines of history, geography, political science, economics, anthropology, and sociology determine content for learners to acquire. Advocates of academic experts deciding upon facts, concepts, and generalizations that students need to acquire believe that vital content would then be in evidence in the social studies. Trivia might then be minimized. Whichever content is selected on the state level would be mandated for learner acquisition. Each social studies teacher then needs to select methods and materials in teaching students to insure optimal progress.

Toward the other end of the continuum, a local school district could identify salient understandings for students to attain. The social studies teachers must determine means of assisting learners to attain the vital subject matter. There would be adequate latitude for the social studies teacher personally to select facts, concepts, and generalizations for

learner attainment. In a state mandated curriculum of subject matter in the social studies, the local teacher and/or school district may supplement that which the state requires of all students.

An eclectic approach could well emphasize state mandated subject matter for student attainment, as well as the school district and individual social studies teachers choose significant facts, concepts, and generalizations to emphasize in ongoing lessons and units.

A third issue in the social studies curriculum pertains to who should be involved in appraising student achievement. States individually may develop and mandate that all learners complete tests written by measurement specialists. This could well be a criterion referenced test (CRT) in which social studies teachers receive from the state level precise, measurable objectives that students need to achieve in order to do well on the mandated CRT. Or, the state may legislate that all students therein take a standardized, norm referenced test. Comparisons may be made of one school district against another in determining which school system, school building, or individual classroom of students exhibited the highest average test scores in the CRT or the norm referenced test.

Traditionally, each social studies teacher has written tests (true-false, multiple choice, matching, completion, and essay) for students to reveal their level of understanding pertaining to subject matter learned. Valid and reliable teacher written test items could measure effectively what students have learned.

An eclectic approach in appraisal procedures would emphasize state mandated tests, as well as district wide, and teacher written test items to ascertain what each student has achieved.

A fourth issue in teaching social studies involves methods of teaching. Should students largely acquire subject matter inductively or deductively? In an inductive approach, the social studies teacher needs to be a good asker of questions to lead students to achieve significant generalizations. Or, the teacher needs to have students identify problems, gather data, develop hypotheses, test each hypothesis, and revise if needed. Students should be guided to discover and to find information relative to the solving of problems.

Somewhat toward the other end of the continuum is a deductive method of teaching. With deduction, the social studies teacher explains in a meaningful manner generalizations of vital subject matter to learners. Students then need to study and give examples of each generalization taught. The social studies teacher may also provide specific instances related directly to the generalization emphasized by the teacher. Concrete, semi-concrete, and abstract experiences may be utilized in deductive thinking.

Most social studies teachers are eclectic in emphasizing both inductive as well as deductive methods of teaching.

A fifth issue emphasizes depth versus survey methods of teaching. Depth teaching is superior to survey means. With

depth teaching, the social studies teacher takes ample time with quality learning activities to assist students to learn much pertaining to each fact, concept, and generalization being taught. Attempting to cover much ground and subject matter in a short period of time is not advocated in depth teaching.

Survey means of teaching stress covering comprehensive subject matter in a relatively short time devoted to instruction. Realia, iconic, and symbolic learnings may be implemented in either depth or survey approaches of teaching and learning.

There are reasons why survey methods of instruction are utilized. A social studies teacher could not teach each vital fact, concept, and generalization in depth. There is inadequate time to do so. Thus, the teacher must decide how much emphasis in each social studies unit should be depth and how much survey teaching pertaining to each cognitive, affective, and psychomotor objective.

A sixth issue emphasizes the degree that a subject centered social studies curriculum should be in emphasis as compared to activity centered units of study. A subject matter approach would emphasize rather heavy use of social studies textbooks, workbooks, and worksheets. A few audio-visual aids need utilization to clarify content being studied.

An activity centered procedure in ongoing units would emphasize the heavy utilization of audio-visual materials, construction and dramatic experiences, music and rhythmic activities, simulations, and problem solving. The student is considered an active, not a passive being in the social studies.

An eclectic social studies teacher would tend to emphasize both subject matter and project approaches in teaching. An important ingredient would be to provide for fast, average, and slow learners in the curriculum. Providing for individual differences is more salient than the debate pertaining to a subject as compared to activity centered methods of teaching.

A seventh issue pertains to the use of microcomputers in the social studies. How much use should be made of computer technology? There are numerous reasons given for emphasizing microcomputer instruction. These include . . .:

1. individual differences can be more adequately provided for with appropriate software.
2. effective sequence is in evidence with quality software.
3. variety in learning opportunities is stressed.
4. drill and practice, tutorial, simulation, games, diagnosis and remediation, as well as computer managed instruction (CMI) to score tests is possible.
5. computers are patient in assisting students again and again in learning.

The writer has visited with many classroom teachers to have them indicate the lack of microcomputer use in the social studies. The reasons given for nonuse of microcomputers includes:

1. software is not available which relates directly to ongoing lessons and units.

2. an inadequate number of microcomputers are available to provide any type of sequential learning for students.
3. available software is not on the present achievement levels of students.
4. the order of content presented does not provide for individual students.

Once adequate numbers of microcomputers and software are available, the social studies teacher needs to

1. determine the degree in which technology will be utilized to assist learner optimal progress.
2. assist student to achieve sequentially in terms of improved software.
3. aid learners to attach meaning to content learned utilizing software and microcomputers.
4. help students of diverse achievement levels learn as much as possible.
5. stimulate interest in learning from various technologies of instruction.

#### In Conclusion

There are numerous issues needing resolving in the social studies curriculum. These issues include

1. state mandated versus local decisions made in the teaching of social studies.
2. emphasis upon inductive as compared to deductive methods of teaching.
3. depth versus survey approaches in ongoing units and lessons.
4. a subject centered versus an activity centered curriculum.
5. degrees of microcomputer and software use in the social studies.

Students individually need to achieve optimally. There are many social problems to solve on the planet earth. These problems include

1. pollution in the environment.
2. poverty and unemployment.
3. wars and rumors of wars.
4. disease prevention and control.
5. racial discrimination.
6. lack of opportunities in life.
7. child and spouse abuse.
8. right of freedom of speech.

The social studies is a highly significant area of the curriculum. It no doubt could be considered the most important academic and curriculum area. If problems in society are not identified and attempts made at finding solutions, other facets of life cannot be utilized to benefit the human condition.

## Selected References

- Cruickshank, Donald R. Teaching is Tough. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1980.
- Henson, Kenneth T. Secondary Teaching Methods. Lexington, Massachusetts: D. C. Heath and Company, 1981.
- Joyce, Bruce, and Marsha Weil. Models of Teaching. Third edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1986.
- Joyce, Bruce, et.al. The Structure of School Improvement. New York: Longmans, 1983.
- National Society for the Study of Education. Staff Development, Part II. Chicago, Illinois: The Society, 1983.
- National Society for the Study of Education. The Humanities in Precollegiate Education, Part II. Chicago, Illinois: The Society, 1984.
- National Society for the Study of Education. Becoming Readers in a Complex Society, Part I. Chicago, Illinois: The Society, 1984.
- National Society for the Study of Education. Education in School and Nonschool Settings, Part I. Chicago, Illinois: The Society, 1985.
- National Society for the Study of Education. The Ecology of School Renewal, Part I. Chicago, Illinois: The Society, 1987.
- National Society for the Study of Education. Society as Education in an Age of Transition, Part II. Chicago, Illinois: The Society, 1987.

## THE STUDENT AND THE PSYCHOLOGY OF LEARNING

The teacher of elementary school children needs to be well versed in principles of learning which educators recommend should be used in teaching pupils. When following these criteria or guidelines, pupils can be assisted in achieving to their optimum. Too often, teachers have violated important principles of learning when teaching pupils thus underachievement has become a part of learners. A good environment for learning is provided when the teacher follows acceptable guidelines in teaching pupils.

### Purpose in Learning

The teacher needs to develop or maintain purpose for learning within pupils. Pupils may learn very little from ongoing learning activities if they "see" little or no purpose in what is being learned. Learners must sense a reason for learning selected facts, concepts, and generalizations. Too frequently, the classroom teacher has merely assigned a certain number of pages for pupils to read from a textbook with no readiness activities involving purpose for reading. The teacher, perhaps, merely stated the following: "read pages 110 to 113 for tomorrow and answer questions five, six, and seven at the end of the chapter." It is no wonder that many learners fail to sense purpose for reading.

If pupils are to read content from a basal reader, for example, the teacher can guide pupils in a discussion pertaining to the related pictures in the textbook. Pictures from the teacher's file could also be utilized. As these pictures are being discussed, the teacher could print the related new words on the chalkboard that pupils will be encountering in their reading. These words should be printed in neat manuscript style and their meaning discussed. Pupils can then obtain a mental image of these words from the chalkboard and utilize these learnings in recognizing new words which they will

meet in print. They should also be able to recall the meanings of the new words when reading so that meaningful learning may take place. As the pictures and related new words are being discussed, pupils should ask questions and identify problem areas. Pupils can then read to find information to answer these questions or problem areas. Thus, a purpose is involved in reading and that is to get needed information which the learner desires. Students learn more if they sense that a purpose is involved in learning than if no reasons exist for participating in a given learning activity.

### Interest in Learning

It is important for teachers to select learning activities which capture the interests of pupils. Pupils should learn more if they are interested in a given learning activity as compared to having a lack of interest. Too often, teachers have not considered the interests of pupils when selecting appropriate learning activities. Thus, learners do not achieve to their optimum. The teacher can construct an interest inventory whereby pupils can respond in checking what is of interest to them. For example, on this interest inventory, all pupils could check their hobby or hobbies from those listed by the teacher. Space should be left for writing in their hobby or hobbies if they are not listed. Hobbies which pupils have can become a definite part of ongoing learning activities in a given unit. For example, stamps from a collection, pertaining to a unit of study of Great Britain, can become a part of the learning activities on that country. Or, a rock collection could become a definite part of a science unit pertaining to the changing surface of the earth. On the interest inventory, some pupils may indicate positive attitudes toward listening to music of other lands. Certainly these musical recordings can be brought into selected social studies units when they relate to the nations or areas of the world being studied. Teachers need to study various interest inventories and develop an instrument which would give data

on ways of capturing the interests of pupils.

Pupils, generally, will show little interest in a given learning activity which is excessively complex. For example, pupils who read well below grade level will not be interested in reading content from books which are written for the grade level they are presently in. The words, terms, and ideas being presented from these textbooks will not be on the understanding level of pupils. Thus, interest in learning will lag. Nor will talented and gifted learners generally be interested in content which is written well below their present achievement level in reading. These learners will generally be bored and feel a lack of challenge in learning activities which have excessively low standards.

Some learning activities have a tendency to capture pupil interest more as compared to other kinds of activities. Well selected films, filmstrips, pictures, slides, excursions, and records can generate much pupil interest if properly introduced. Pupils from different achievement levels in a group can generally benefit from these learning activities. They can interpret and gain content on different achievement levels.

Learning activities involving discussions can make for a lack of interest on the part of learners if the ideas being discussed contain excessively difficult vocabulary terms which learners do not understand or if the discussion activity is carried on for too long a period of time.

#### Meaning Attached to Learning

To benefit adequately from ongoing learning activities, pupils need to understand that which is being learned. Too frequently, pupils have memorized facts, statements, and conclusions without really understanding or attaching meaning to what has been learned. Or, pupils have memorized content for a test and then suffer a rapid rate of forgetting. If pupils attach meaning to what is learned, an improved retention rate should thus result. All

teachers should be highly interested in having pupils retain as much as possible of what has been learned.

For learning to be meaningful for pupils, the teacher must assess the learner in terms of his present achievement level. Thus, in initiating or introducing a unit, the teacher should develop some kind of pretest which will assist in determining present achievement levels of pupils. This could involve the use of a variety of evaluation techniques. Paper-pencil tests could be used as well as discussions. Not all evaluation, of course, should be done through the use of paper-pencil tests. Tests such as these will not adequately measure how well pupils can utilize a microscope in science or how well pupils can construct and make models related to ongoing social studies units.

Once pupils have been pretested, the teacher needs to adjust objectives in a unit of study. The objectives should then be attainable for pupils. Careful selection of learning activities or determining an appropriate instructional sequence for learners is then important. If the objectives are too difficult for pupils to realize, meaningful learnings will then not occur. Learning activities which are too difficult for pupils make for a lack of meaningful learnings on the part of children. The teacher needs to pay careful attention to proper sequence when pupils are pursuing ongoing learning activities. The other extreme in sequence could pertain to the teacher duplicating what learners already have mastered or learned in previous units of study. Thus, it is important that the teacher think in terms of good sequence when providing learning activities for pupils.

The teacher can be misled in providing for meaningful learning activities for pupils if the type of pretest utilized is not in harmony with the learner's present achievement level. For example, a first grade pupil will not reveal what he knows in a given unit of study if he is asked to respond in writing to

essay items in a pretest situation. Nor would he reveal present achievement levels, generally, if he were asked to read and respond to complex true-false, multiple-choice, completion, or matching items. Each child must be pretested using an appropriate evaluation technique which is in harmony with child growth and development characteristics.

### Motivating the Learner

Pupils who lack motivation will not have the necessary energy level to become actively involved and benefit fully from ongoing learning activities. The teacher must think of strategies which assist learners to achieve to their optimum due to appropriate motivation. Forcing learners to memorize a given set of facts, generally, would make for situations where learners lack motivation. In some situations, teachers want to depend upon scolding or embarrassing learners in order to "encourage" learning. Sooner or later, teachers discover that under such circumstances pupils learn to dislike learning, teachers, as well as the school as an institution. Pupils may come to the conclusion that school is an unhappy place and learning is something to be shunned. A few teachers still feel that pupils learn only when they are forced to and that learning occurs only in situations involving drudgery. These teachers may think and feel that learning cannot be enjoyable for children and in their deeds emphasizes that "learning" can come about largely when experiences for children are made unpleasant through regurgitation of facts, rote learning, and drill.

The teacher rather needs to think of stimulating pupils so that an inward desire to learn will result. A good bulletin board developed at different intervals when units are taught can do much to assist pupils in asking questions whereby a desire exists to get data in answer to these questions. In developing these bulletin board displays, the teacher needs to think of

possible questions pupils may raise pertaining to the pictures contained thereon. Can the bulletin board display help develop an inward desire to learn on the part of pupils? This question needs to be answered in the affirmative by classroom teachers. The teacher can also develop interesting learning centers pertaining to different units of study. This should assist learners in identifying important problem areas thus motivating pupils in developing an inward desire to learn. The teacher can also utilize films and filmstrips in teaching. These aids to learning must be on the understanding level of pupils and have content which would stimulate pupil curiosity. Learning activities need to be selected carefully by teachers so that pupil motivation for learning will be at its optimum.

#### Providing for Individual Differences

Too frequently, all pupils in a classroom are on the same page at the same time when a given textbook is utilized in the classroom. Situations such as these do not provide for individual differences within a classroom. For some time, educators have recognized that pupils differ from each other in capacity, achievement, interests, energy level, and home background, among other factors. Common sense would say that not all learners then can be at the same place at the same time when utilizing textbooks for a given lesson or lessons.

Some pupils learn more from a particular learning activity as compared to others. For example, a third grade pupil with below average achievement may not benefit as much as possible from a third grade textbook since it is generally written for average achievers. However, this same pupil may learn much from studying and discussing content from audio-visual aids which pertain to ongoing units of study. Pupils have different learning styles. It behooves the classroom teacher to select learning activities which provide for different learning styles within a classroom.

In addition to different learning styles, pupils achieve at various rates of speed. There are many different approaches and methods available to the teacher to use in order that individual differences within a classroom can be provided for. For example, in the individualized reading program, each pupil would select his own library book to read. A pupil may be in the fifth grade, but he is reading on the third grade level. Thus, a library book is selected by this child which is on his reading level. He also selects a book which contains content which is interesting and meaningful. Another student who is in the fifth grade may be a talented and gifted learner. This student may select and read library books which are on the seventh and eighth grade levels. He should select library books which are interesting and challenging. Having completed reading a library book, the pupil reveals how well he has comprehended the contents of that book. Once learners have selected a library book, they read at their own unique rate of speed. Child A should not compare himself with Child B in terms of difficulty of the library book being read or in terms of rate of speed in reading. Each child is unique with his own interests, capacity, and achievement. Following the completion of reading a library book, the child may have a conference with his teacher. The teacher must eventually get to know the contents of various library books well. He will need to assess the child's comprehension in gaining ideas from reading. Questions asked by the teacher should not destroy interest in reading; rather, the learner should be stimulated in wanting to engage in reading more complex library books with continued improvement in the area of comprehension. In the conference, the teacher can also evaluate the breadth of content pupils are reading when selecting various library books for the individualized reading program.

In discussing individualized reading, the writer has attempted to describe how pupils can select library books which vary in complexity as far as reading levels are concerned. Each pupil, then, ideally selects a library book which is on his reading level. The classroom setting needs to have an ample number

of library books dealing with various reading achievement levels. Each learner also will differ from others in the rate he is reading content. Each child in a class needs to be successful in achievement so that optimal growth can take place.

### Balance Among Objectives

It is important for the teacher to think in terms of some kind of balance among objectives. If a teacher only emphasizes cognitive domain objectives which deal with the use of the intellect, pupils will not develop as well as possible in other facets of development. Cognitive objectives, of course, are of utmost importance for pupils to achieve; however, psychomotor and affective domain objectives should also be stressed. Psychomotor domain objectives deal primarily with the use of the muscles such as in making and constructing objects and models, repairing objects and items, dramatizing situations, performing folk dances, and playing games. Affective domain objectives pertain to attitudinal development of pupils. All pupils need to have positive attitudes toward learning. Positive attitudes will assist learners to achieve at their optimal rate in cognitive and psychomotor domain objectives. Each pupil should develop positive attitudes toward himself as an individual so that an adequate self concept may result. Certainly, learners need to have wholesome attitudes toward others so that good human relations can then be in evidence. A lack of respect toward classmates generally results in behavioral problems. Feelings of respect toward others are the heart of democratic living. Pupils should develop wholesome attitudes toward others. All individuals desire to be respected.

Cognitive domain objectives are important for learners to achieve. An ample number of understandings need to be developed and understood so that critical and creative thinking can be emphasized in problem solving activities.

Life in society demands that individuals become highly proficient in problem solving. All human beings face problems in life which require the best solutions possible. There is no better place to emphasize problem solving than in the elementary school years. The environment in school can be structured for pupils so that problem solving activities can be stressed. The teacher needs to structure an interesting learning environment in the classroom which will guide learners to identify important problems. In introducing a unit, an attractive bulletin board display can capture pupil curiosity whereby questions are asked to begin learning activities which involve the problem solving approach. These questions need to be adequately delimited so that related data or information can be gathered. Further stages of problem solving can then be stressed such as developing and testing hypotheses, and revising the original hypotheses if necessary. The teacher needs to think of numerous learning activities that stimulate pupil curiosity which is basic to identifying problems or questions when using the problem solving approach. Thus, it is important for the teacher to stress cognitive, as well as psychomotor and affective domain objectives. One domain of objectives such as the affective or attitudinal dimension may hinder or help achievement in the other domains—the cognitive and psychomotor.

A different classification scheme which may be utilized in an attempt to provide for balance among objectives is understandings, skills, and attitudes. When studying a unit on Great Britain, for example, learners need to develop important understandings pertaining to agriculture, manufacturing, urban living, family living, transportation, and communication. Pupils, of course, would not understand the people of Great Britain unless generalizations are developed pertaining to the above named areas.

Pupils also need to develop an adequate number of skills such as reading, writing, speaking, listening, using the card catalog, using reference materials, making and constructing objects and models, and working effectively in groups.

Attitudinal objectives would deal with the same category as affective domain objectives. Again, it is of utmost importance for pupils to develop wholesome attitudes toward themselves and others so that an adequate self concept exists and good human relations are in evidence.

### Success in Learning

The teacher must select objectives, learning activities, and evaluations techniques which assist learners in developing feelings of success. Nothing is gained by having pupils develop feelings of failure. Much money is wasted each year in "teaching" pupils when they experience failure and frustration. The teacher's task is to teach pupils rather than failing or flunking individuals in the elementary school. Too often, teachers have felt that their role is to pass or fail pupils rather than guide them to achieve to their optimum. A teacher may think and feel that he has high standards for pupils when rigid standards are utilized to determine grades that pupils should receive. All teachers should realize that tests can be written which are excessively difficult and all learners in a class could receive failing marks or grades. Tests can be written which are excessively easy and most learners could get very high or excellent marks or grades. What is important is that pupils realize objectives through carefully selected learning activities. The objectives may need to be properly adjusted after a pretest has been administered in beginning a new unit of study.

Pupils who experience excessive failure generally develop an inadequate self concept. They feel they can't achieve well because of experiencing much failure; thus, a lack of successful accomplishment results.

Learning activities need to be adjusted to the present achievement level of each child. Careful attention needs to be paid to sequence so that pupils may experience success in ongoing learning activities. Teachers need to reward pupils with praise if each pupil is doing better than formerly. All

pupils then can receive praise regardless of capacity or present achievement levels. Praise for improved performance generally spurs pupils on to greater efforts.

### Respect for Pupils

It is of utmost importance for teachers to respect all pupils under his or her influence. As was mentioned previously, Pupils differ from each other in capacity and achievement. Thus the teacher needs to respect pupils regardless of capacity and achievement levels. The slow learner, as well as average and talented achievers, need to be assisted in realizing their optimum achievement. Provisions need to be made in the classroom which will provide for each individual pupil.

Pupils come to school from different socio-economic levels. Some of these pupils wear more expensive clothing than others. Some are neat and tidy. Others wear old clothing which may not be as clean as the teacher would desire it to be. However, the teacher must realize that pupils can come from unfortunate home situations. An inadequate income may be the lot of some parents. Misfortune such as illness, death, unemployment, and dissension may afflict a considerable number of homes in a given community. Thus, the child in such an environment cannot achieve to his optimum. He may worry so much over the home environment that little time is left for thought, study, and learning. By having much knowledge about each individual pupil, the teacher can use this information to do a better job of teaching. Certainly, the information, used properly by the teacher, should assist in providing for individual differences. Teachers become much more tolerant and understanding of learners if they understand each child's home background and experiences.

A child in the elementary school may speak nonstandard English due to models presented in the home environment. Too frequently, teachers have felt

that nonstandard English should be criticized so that pupils will want to speak standard English. Teachers may have corrected pupil's spoken language until there is little desire left to speak, especially in the teacher's presence. Pupils will gradually learn standard English when listening to the teacher who presents an example or model to follow. Learners may also get examples pertaining to the speaking of standard English when listening to recordings, tapes, films, and the voices of others who speak English which is generally acceptable to middle class Americans. Pupils should not be forced to change from nonstandard to standard English. Generally, forced changes placed on learners make for negative attitudes toward the teacher and school.

The teacher should respect pupils who come from minority groups such as those who speak a foreign language in the home or those who come from homes whose religious preferences are different from that of others in the class setting. Pupils of different races need to be accepted as individuals who deserve the best in education and other opportunities regardless of creed or religion. Learners should be assisted in developing an adequate self-concept so that optimal contributions can come from all in a democratic society.

#### In Summary

There are important criteria that should be followed by teachers when providing learning activities for pupils. Pupils should sense a purpose or purposes for learning. Thus, learners would feel that a reason or reasons exist for participating in specific learning activities. Teachers need to select those learning activities which would capture pupil interest. It is of utmost importance that learners understand what is being taught so that meaningful learning occurs. If pupils lack motivation, a lower energy level will be available for ongoing learning activities. Teachers should work in the direction of stimulating pupils so that an inward desire to learn will

result. Pupils achieve at different rates of speed and at different achievement levels thus making it necessary to provide adequately for each child in the classroom. Intellectual development on the part of learners is important but is not the only category of objectives that should be emphasized when teaching pupils. There needs to be some kind of balance based on rational thought among the following categories of objectives—understandings, skills, and attitudes. Attitudes affect the degree to which a pupil will develop to his optimum in understanding and skills objectives. Attitudes are changed in some cases by obtaining more information. Developing appropriate attitudes can help in realizing understandings and skills. Each category of objectives affects other categories such as positive attitudes toward learning affect achievement in objectives which pertain to understandings. Learners need to be successful in learning and be respected by others.

## TEACHING HISTORY IN THE SOCIAL STUDIES

A study of history needs to be stimulating, challenging, as well as provide for students of diverse achievement levels. Too frequently, history has been boring, repetitious, and routine. The teacher must possess comprehensive subject matter knowledge in teaching history. Beyond the breadth and depth of known subject matter, the history teacher must utilize desired principles of learning from the psychology of education. Utilizing these principles of learning, the history teacher is better able to secure the attention of learners in ongoing lessons and units, as well as assist students to retain more optimally acquired subject matter. Which criteria then should the teacher of history emphasize from the psychology of education?

### Principles of Learning and History

To guide students to attain more optimally in history, the teacher needs to provide meaningful experiences. When subject matter has meaning, students understand vital facts, concepts, and generalizations. When students do not attach meaning to what is being learned, achievement goes downhill. Students may think of other things than the achieving of objectives in ongoing lessons and units in history. Meaningless content lacks vitality and use for students.

A second principle of learning emphasizes that students experience interesting learning opportunities. Securing the attention of students

in a given lesson becomes easier after obtaining learner interest in the subject matter. A variety of materials are available to guide students to attain objectives in history. These materials include textbooks, workbooks, worksheets, as well as audio-visual aids. Diverse kinds of materials need to be utilized as learning opportunities to assist students to attain vital goals in history. The reason given for using a variety of kinds of materials and activities is not for the sake of doing so, but to develop interest within students to learn. With interest, effort is put forth by learners to achieve and progress in history. Low energy levels for learning are due, in many cases, to a lack of student interest in learning.

Thirdly, students need to perceive purpose in learning. If purpose is present, learners perceive reasons for achieving goals in the history curriculum. Perceived purpose may be developed inductively by students. The history teacher needs to be a good asker of questions to assist students in arriving at purposes to attain goals in ongoing lessons and units. Students then are guided to perceive reasons for learning. Deductive procedures may also be utilized to assist learners to perceive purposes in studying historical units of study. With deduction, the history teacher clearly and concisely explains the value of subject matter to students in the curriculum. Perceiving purpose in learning guides students to realize the worthwhileness of subject matter being studied in history.

Fourthly, the history teacher needs to develop the whole person by emphasizing three categories of objectives in teaching-learning situations. One category of objectives - understandings - should guide

students to attain worthwhile facts, concepts, and generalizations. Understanding objectives in history need careful selection and weight. What is significant needs to be stressed in teaching and learning. Skills, as a second category of objectives, emphasize students engaging in critical and creative thinking, as well as problem solving. Students engage in learning by doing when skills objectives are emphasized in the history curriculum. Psychomotor learnings also stress acquiring skills objectives. Students need to think critically as well as creatively pertaining to content in history. Being able to identify and solve problems in history is equally salient.

Attitudinal goals also need attainment by students. Positive attitudes toward learning aid learners in attaining understandings and skills goals. Wholesome attitudes are indeed salient for student achievement in the curriculum, as well as in the societal arena. Students should like and prize the study of history.

The history teacher also needs to provide for individual differences among students. Fast, average, and slow learners should achieve as much as possible in history. No student should be deprived of learning as much history as possible. With a variety of learning opportunities, including the use of reading and audio-visual aids, each student must be encouraged to achieve optimally.

To summarize, students need to receive

1. meaningful learning opportunities.
2. interesting activities.
3. purposeful experiences.

4. learning opportunities which emphasize understandings, skills, and attitudinal goals.
5. activities and experiences that guide each learner to learn as much history as possible.

#### Philosophy of Education and the Teaching of History

Philosophy provides direction to the history teacher in selecting objectives, learning opportunities, and appraisal procedures in the curriculum. Each teacher needs to develop a personal philosophy of teaching history. Philosophies need to be studied, analyzed, and selected strands implemented based on careful thought and evaluation.

Experimentalism, as a philosophy of education, stresses a problem solving strategy. Students with teacher guidance identify problems in ongoing lessons and units in history. The problem chosen is adequately delimited in order that solutions may be sought. To solve a problem, data must be gathered. Data comes from the use of primary and secondary sources. A hypothesis, or answer to the identified problem, is an end result. The hypothesis is tentative, never absolute, and subject to testing. Discussions, as well as further primary and secondary sources, may well be a means of testing the hypothesis. The hypothesis is then accepted, modified, or refuted.

The sequential steps of problem solving are flexible, not rigid. Problems selected need to be life-like, not artificial. These problems exist in society. History and society are not to be separated from each other, but are integrated entities. With learners being heavily involved in problem selection, purpose or reasons for learning are

inherent. With purpose, interest comes forth in learning. The interest provides from effort. Effort must be put forth by all students to achieve objectives in history. To experimentalists, interest and effort are one and not separate from each other.

Experimentalists believe that one can know reality through experiences alone. The individual interacts with members in society. Knowledge is then secured. Knowledge comes from problem solving endeavors in the societal arena of change. Knowledge is always tentative due to the world of change. With change, problems arise. New problems need identification and solutions. In perceiving solutions, the experimentalist always looks at the consequences. The consequences are tentative and need to be tested. Society changes and with change, new problems arise. Tentativeness, not absolutes, is a key concept in experimentalist thinking.

Realism, as a second philosophy of education emphasizes that the knower can know the real world in whole or in part, as it truly is and exists. The knower does not merely experience the real world, but receives a duplicate or replica of it. Since the real world can be known in whole or in part, precise objectives need to be attained sequentially by students. The specifics that make up the real world can be identified in any academic discipline.

The history teacher needs to select the measurably stated objectives that students are to achieve. The objectives must be arranged by the teacher in ascending order of complexity. From the simple to the complex is an excellent guideline for the history teacher

to utilize in arranging the precise ends in proper sequence for student achievement. A logical history curriculum is then in evidence.

The real world of history can be known by learners, partially or entirely, after attaining an increased number of measurably stated objectives.

The history teacher must select learning opportunities which guide learners in goal attainment. After instruction, teachers can measure if students have or have not achieved each goal successfully.

Each objective must be precise and measurable to determine if students have or have not achieved the desired end.

A third philosophy of education which is idealism may also be emphasized in the teaching of history. Idealists believe the knower can only receive ideas of history, and not experience it per se, or know history in whole or in part as it truly is or exists.

The history teacher, as an idealist, selects vital subject matter in lessons and units for student attainment. Idealism emphasizes strongly that the mind or intellect of the learner needs cultivating. Mental development in history is the overall objective for students to attain. Mind is real and needs to be developed while achieving vital concepts and generalizations. Thus, the attainment of subject matter by learners becomes the number one objective in history. The history teacher must be educated and trained to be a true academic. The academic knowledge of the teacher can then be transmitted to students. With the use of textbooks, single or multiple series, workbooks, selected academic audio-visual aids, as well as dynamic lectures and discussions, students hopefully will achieve significant abstract ideas

in history. The universal and the abstract is to be prized above the concrete and the specific.

Existentialism, as a fourth philosophy of education, stresses choices and decision-making by the individual in a flexible, open ended learning environment. Each student, for example, may select which tasks to complete sequentially at diverse learning centers. The learner may omit tasks which lack personal relevance and interest. Time on task is important. Compulsion and force to have students learn is frowned upon. Students individually shoulder responsibilities in selecting learning opportunities and completing the tasks therein.

A second method of emphasizing tenets of existentialism pertains to student-teacher planning of objectives, learning activities, and appraisal procedures in ongoing lessons and units. The emphasis here is on cooperative planning involving students with teacher guidance. A third procedure stressing tenets of existentialism emphasizes a contract system. The teacher plans with each student as to what the latter would like to complete as learning activities in the contract., The student needs to be heavily involved in planning the contents of the contract. The due date, as well as the signature of the student and the teacher, should appear on the contract.

As students progress, develop, and achieve, increased facets of existentialism may be emphasized. Existentialists believe that each person is condemned to be free. First, an individual is born and exists, then he/she must find their essence or purposes in life. The purposes are given to no person. They must be sought within the framework of an absurd environment. Values clarification strategies in

history work well. Leaders making history made choices from the many alternatives. Students in history classes need also to learn to make decisions with many alternative choices in the .offing.

Existentialists believe knowledge to be subjective, not objective. Truth resides within the individual. The individual must learn to make choices within an absurd, subjective environment. The choices must be moral decisions within a free environment. Permitting others to make choices for the self emphasizes a lack of being human. To be human means to make choices personally with many options available.

To summarize each philosophy of education, the following statements can be made.

1. Experimentalism stresses a problem solving strategy.
2. realism stresses the use of predetermined, measurably stated objectives for students to attain.
3. idealism advocates a subject centered curriculum in which mental development of learners is stressed.
4. existentialism emphasizes moral choices and decisions be made by learners in an open ended environment.

#### Computer Assisted Instruction in History

Computer Assisted Instruction (CAI) has much to offer in the history curriculum. A first type of software to emphasize in CAI is drill and practice. Drill and practice emphasize review of what students have learned previously. Vital facts stress the need for drill and practice. These facts can be forgotten unless drill and practice is in evidence. Quality software needs selection and implementation in

ongoing lessons and units. The software must relate directly to the lesson or unit in history presently being taught. Also, the content in the software needs to be understandable by involved students. Meaning must be attached to vital facts.

As a second kind of software, tutorials need to be emphasized in the history curriculum. Tutorials present new information or subject matter to students. Sequential content must be in the offering. Learners may then experience success in the software presentation. With tutorials, as well as other types of software, quality sequence needs to be in evidence. Producers of software need to try out their materials in pilot studies, prior to marketing the product. If students in the pilot study make an excessive number of errors while interacting with the program, an improved sequential set of experiences need to be in the offering. Evaluating if the order of experiences in the software program is appropriate remains crucial. If learners do not experience success in learning, there will be a tendency for underachievement to be in evidence.

Simulation, as a third kind of software program, needs to stress reality and realness in its learning opportunities. Artificial situations in simulations need to be avoided. The real world must be emphasized in simulated situations. Within the real world, problems arise. To solve each problem, alternative choices exist. Students must consider the alternative choices, prior to making a decision within the problem solving arena. Simulations should emphasize integrating school and society. What is out in society needs to be inherent in the curriculum. School and the societal arena can be brought together in

simulation software programs. As is true of all software, students need to have ample opportunities to interact with content presented on the monitor. Responses involving deliberation must be made by students to problems presented on the monitor. Individual as well as committee decisions can be made by students working with simulations in the history curriculum.

Games, as a fourth kind of software, should receive ample emphasis in history. One or a committee of learners may work on a game. Easier questions to respond to are worth fewer points to the student, as compared to more complex questions selected. The individual or the group that has the most points wins the game. Game software should assist students to achieve objectives in history. Learners may learn not only worthwhile facts, concepts, and generalizations in history, but also achieve wholesome attitudes toward others within the framework of a competitive learning environment, such as in the playing of games using software and microcomputers.

All software needs to be debugged, prior to its use. Thus, there should be no spelling, punctuation, capitalization, or grammatical errors. Accurate subject matter in history needs to be in the offing. Trivia and the irrelevant should be weeded out.

#### In Summary

The history teacher must follow desired principles of learning from the psychology of education when teaching students. These guidelines in their implementation should guide learners to achieve more optimally in history.

A comprehensive knowledge of the philosophy of education provides guidance and direction to the history teacher in selecting objectives, learning opportunities, and appraisal procedures in ongoing lessons and units. The best of each philosophy must be chosen by the teacher to provide direction in the teaching of history. Hopefully, quality philosophies of education implemented in the teaching of history will aid learner progress in the curriculum.

Software and microcomputer use must guide students to attain objectives in history. Selection of software needs to follow definite guidelines so that learners individually may achieve as much as possible in history.

- Cruickshank, Donald R. Teaching is Tough. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1980.
- Henson, Kenneth T. Secondary Teaching Methods. Lexington, Massachusetts: D. C. Heath and Company, 1981.
- Joyce, Bruce, and Marsha Weil. Models of Teaching. Third edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1986.
- Joyce, Bruce, et.al. The Structure of School Improvement. New York: Longmans, 1983.
- National Society for the Study of Education. Staff Development, Part II. Chicago, Illinois: The Society, 1983.
- National Society for the Study of Education. The Humanities in Precollegiate Education, Part II. Chicago, Illinois: The Society, 1984.
- National Society for the Study of Education. Becoming Readers in a Complex Society, Part I. Chicago, Illinois: The Society, 1984.
- National Society for the Study of Education. Education in School and Nonschool Settings, Part I. Chicago, Illinois: The Society, 1985.
- National Society for the Study of Education. The Ecology of School Renewal, Part I. Chicago, Illinois: The Society, 1987.
- National Society for the Study of Education. Society as Education in an Age of Transition, Part II. Chicago, Illinois: The Society, 1987.

## MULTICULTURAL EDUCATION AND THE MIDDLE EAST

The Middle East area of the world has been and continues to be an area of tension. Two separate nationalities both desire the land formerly called Palestine, and is now Israel and the occupied West Bank. Surrounding this region are the Hashemite Kingdom of the Jordan to the east, Lebanon to the north, Syria to the northeast, and Egypt to the west. These four nations are Arabic speaking and of Arabic culture, whereas Israel and the occupied West Bank represent both Jewish and Palestinian Arab speaking peoples.

Students in multicultural social studies units need to study units on the Middle East. Both the Jews in Israel and the Palestinian Arabs, living on the occupied West Bank want the land formerly called Palestine. Palestinian refugees live in camps in the Hashemite Kingdom of the Jordan, Lebanon, and Syria. Some of these refugees have integrated within the states of Jordan, Lebanon, and Syria as citizens. Many live in refugee camps.

### Geography of the Middle East

The Holy Land area, important to Arabs, Jews, and Christians has unique geographical features. The Jordan River is 200 miles long. In a straight line, the distance in length is 67 miles. The Jordan River is muddy due to its rapid flow of water. In the north the Jordan River receives its water from the Sea of

Galilee<sup>which</sup> has clear water, relatively unpolluted. The Jordan River empties its water into the Dead Sea, which is approximately 1300 feet below sea level. The rapid drop in elevation from 600 feet below sea level (the Sea of Galilee area) to 1300 feet below sea level (the Dead Sea area) makes for rapidly flowing muddy waters. No life exists in the Dead Sea since there is no outlet. The Dead Sea contains 26% salt and other minerals. Salty water such as this does not permit flora or fauna to exist.

Going four miles northwest of the Dead Sea is the ancient city of Jericho. Jericho has been labeled by archeologists as being the oldest, continuously inhabited city on the face of the earth. There are clear, excellent excavations marking Jericho, dating back to 8,000 B.C. Jericho receives less than eight inches of rainfall in a year, thus making for a desert region here and in the Dead Sea region. However,<sup>due to irrigation</sup> Jericho is a beautiful garden spot with its luscious bananas, dates, citrus fruits, pomegranites, and garden crops (green beans, carrots, peas, tomatoes, and potatoes). The ruins of an ancient Omayyad Palace, destroyed by an earthquake, is in Jericho. The Omayyads were Caliphs or rulers of the Moslem world from 660 to 750 A.D. There are beautiful mosaics and strong columns or pillars at this site. Looking directly west in Jericho is the Mount of Temptation, where, according to Christian tradition, Christ was tempted to bow down and worship the tempter Satan. Jericho is inhabited by Palestinian Arabs. Jericho is on the West Bank, which was captured by Israel in the 1967 Six Day War between Israel and the Hashemite Kingdom of Jordan, Syria, and Egypt.

Going directly West from Jericho, for a distance of eighteen miles, is the walled city of East Jerusalem, also located on the West Bank of the Jordan River. Inside the walls of old Jerusalem are sites holy to three religious groups. On the eastern wall is the Golden Gate which is closed permanently and is one of seven gates of the old city of Jerusalem. The Dome of the Rock, a Moslem mosque, is located adjacent to the Golden Gate. The Dome of the Rock, built in 691 A.D., is holy to devout Moslems. This octagonal mosque contains a golden colored dome and is the third holiest site in the world to devout Moslems. It was from this site that Mohammed (570-632 A.D.), according to devout Moslems, made a midnight journey to heaven and returned. Inside the Dome of the Rock is Mount Moriah, where according to Biblical traditions, the patriarch Abraham was tempted to offer his son Issac as a living sacrifice. Mecca, the birthplace of Mohammed, and Medina, the place of his entombment, are the two holiest sites to devout Moslems.

Directly west of the Dome of the Rock is the ancient Wailing or Western Wall, completed approximately 2000 years ago in the days of Herod the Great. The Western Wall, according to devout Jews, is the only remnant of the ancient Jewish temple. The Western Wall is a leading place of worship for followers of Judaism.

Inside the walls of old Jerusalem, west of the Dome of the Rock and the Western Wall, is the Church of the Holy Sepulchre. This church was completed in 1142 A.D. and was believed by the Crusaders to be the place of crucifixion and entombment of Christ.

Jerusalem then is a holy city to three religious faiths.

Going five miles south of Jerusalem is the city of Bethlehem. Jerusalem and Bethlehem, located in the Judean Hills, are 2500 feet above sea level. The temperature readings of these two cities are ten degrees warmer than Jericho at the same time of day. Jericho (700 feet below sea level) and Jerusalem-Bethlehem (2500 feet above sea level) provide for great variations in temperatures. For each 300 feet in elevation, the temperature decreases approximately one degree.

Bethlehem is the site of the Church of the Nativity, holy to the Crusaders. Crusaders believed this area to be the birthplace of Christ. A fourteen point star in the Church of the Nativity marks the grotto area where Christ was born.

Going thirteen miles south of Bethlehem, still in the Judean Hills, is the Mosque of Abraham. Inside the mosque are the tombs of Abraham and Sarah, Isaac and Rebecca, and Jacob and Leah. These patriarchs and their wives are significant people to devout followers of Islam, Judaism, and Christianity.

Going north again in the Judean Hills to an area just outside of Bethlehem is Rachel's tomb, holy to both followers of Islam and Judaism. Rachel was a wife of Jacob, the patriarch.

Going north of Jerusalem for a distance of forty miles is the city, nestled in the Judean Hills called Nablus, or ancient Samaria. On Mount Gerizim in Nablus is a colony of Samaritans. The Samaritans were offspring of marriages between the Assyrians, who captured the northern kingdom of Israel in 722 B.C., and Jews who were local inhabitants. There are 440 Samaritans left

on earth. They have their own temple on Mount Gerizim. Samaritans are endogamous in that they marry among their own people only. Tourism is a major source of income for the Samaritans.

Near Nablus is a hilltop where Samaria, the capital city of the Northern Kingdom (ancient Israel) was located. On this hilltop are selected significant ruins. These include large columns of Herod the Great's palace, the foundation of a shrine dedicated to Caesar Augustus, and King Ahab's place.

Forty miles north of Nablus is the Church of the Annunciation in the city of Nazareth. This church and general area of Nazareth is holy to devout Christians. Nestled in the Judean Hills, the Church of the Annunciation, according to tradition, is the spot where an angel announced the birth of Christ to Mary. The Church of the Annunciation also contains the workshop of Joseph, the carpenter, the husband of Mary and father of Christ.

Along the Mediterranean Sea is rather level land from Haifa in the north to Tele Aviv, more so in the center of the coastal area. Haifa is a leading port for Israel, whereas Tele Aviv is their largest city and center of banking, business, and industry.

In the land of Palestine, the student can study significant physical geography in terms of hills (Judean Hills), plains (along the Mediterranean Sea), a river (the Jordan River), seas (the Sea of Galilee and the Dead Sea), elevation of land (Dead Sea 1300 feet below sea level whereas Jerusalem is 2500 feet above sea level), as well as desert regions (Jericho and the Dead Sea areas).

## History and the Middle East

Historical events provide for cultural differences among nations and nationalities. Students need to attach meaning to the history of both Jews and Arabs. Significant events in the history of the Jews include Abraham, the patriarch, being called from Ur of the Chaldees (now in Iraq) to the land of Canaan, later called Palestine. Abraham, among other children, had two sons. One son - Isaac - became the forefather of the Jews, whereas, another son - Ishmael - became the father of the Arabs.

Isaac became the father of Jacob. Jacob and his family experienced a famine in Palestine. Previously, Jacob's son Joseph had been sold into slavery to Egypt. Here Joseph rose to being second in command next to Pharaoh. Joseph was made the food czar to store grain for later times of famine. His father Jacob sent sons to bring grain from Egypt. Eventually, Joseph had his father and his entire family come to live in Egypt, which was then a land of plenty. Later, after Joseph's death, Egypt forgot his leadership and achievements. The descendants of Jacob and Joseph ultimately became slaves in Egypt.

Moses was chosen to lead the descendants into Palestine. However, after leaving Egypt he spent forty years in the Sinai Desert with his followers. Joshua, followed in succession to Moses to lead Jacob and Joseph's descendants (the Israelites) into Palestine. There were Canaanites already living in the

land when the Israelites came into Palestine in 1200 B.C. After many wars, the Israelites took over most of Palestine. Under King David, approximately 1,000 B.C., the Israelites had taken over most of Palestine, except the area of the Philistines (the cities of Askelon, Ashdod, and Gaza). King David made Jerusalem the capital, instead of Hebron which had been the capital city. David's son Solomon followed in succession as King. Solomon built the wall around Jerusalem and also built the ancient temple. After Solomon's death, the Israelites of the Northern Kingdom (Israel) revolted against the rulership of King Rehoboam, the son of Solomon. The Northern Kingdom (Israel) was then ruled by Jeroboam while Rehoboam stayed as King of the Southern Kingdom (Judah with Jerusalem as its capital city).

In 722 B.C. the Northern Kingdom (Israel) was captured by Assyria while the Southern Kingdom (Judah) was captured by the Babylonians in 587 B.C. Jews returned to Jerusalem in 527 B.C. under the leadership of Nehemiah, who led in the rebuilding of the wall around that city. Ezra came later to lead in rebuilding the Jewish temple. There were later hostile rulers to the Jews in the land of Palestine, such as Antiochus Epiphanes of Syria. He forced Jews to offer swine upon alters in Jerusalem. Pork was taboo then and now to devout Jews. With the oppression of Antiochus Epiphanes of Syria in Palestine, the Jews revolted under Judas Maccabeus. The latter was instrumental in bringing independence to Israel from 166 to 63 B.C.

Structural ideas to emphasize following the reign of independence for 166 to 63 B.C. were the following events:

1. The Roman Empire captured Palestine in 63 B.C. under the direction of their general, Pompey.

2. In 70 A.D. the Romans crushed the continual revolts of the Jews leading to the latter's diaspora. Therefore, the Jews left Palestine for other areas, regions, and nations on the face of the earth.

3. In 1897, the World Jewish Congress met under the leadership of Theodore Hertzl, a Jewish Austrian newsreporter.

4. With Theodore Hertzl's leadership, the Jews decided upon the land of Palestine as being the only possible place for their homeland or state. An area in east Africa was offered to them by Great Britain as a possibility for a homeland.

5. In 1917, during the midst of World War I, Great Britain proclaimed the Balfour Declaration in emphasizing Palestine as a homeland for Jewish people from all over the world.

6. In 1922, the Balfour Declaration became a part of the British mandate under the League of Nations.

7. Jews migrated in somewhat large numbers to Palestine. The Arabs, living in Palestine, felt threatened due to the emigration of Jews.

8. Jewish migration to Palestine increased in great numbers during the Nazi rule in Germany (1933-1945).

9. After World War II the tempo of Jewish immigration to Palestine multiplied tremendously due to their being refugees and displaced persons in Europe.

10. The United Nations voted to divide Palestine into a Jewish state and an Arabic state in 1947.

11. Great Britain left Palestine during May of 1948 due to hostilities and impossibilities of enforcing the Mandate and the Balfour Declaration.

12. Israel declared statehood on the date of Great Britain leaving Palestine.

13. Wars were fought between Israel and neighboring Arab nations (Jordan, Syria, and Egypt) after the former declared statehood.

14. When the wars ended in 1948, Israel had 80 per cent of the land of Palestine, leaving many Palestinian Arab refugees in camps in Jordan, Syria, Lebanon, and Egypt.

15. Skirmishes between Israel and neighboring Arab nations occurred across their borders.

Structural ideas pertaining to the Arabic speaking peoples also have a significant history.

The patriarch Abraham was the father of Ishmael, the forefather of the Arabs (1600B.C.). The beginning of the Moslem religion occurred in 570 A.D. with the birth of Mohammed in Mecca, presently one of two capital cities of Saudi Arabia. During his ministry Mohammed won many converts. He is entombed in Medina (also in Saudi Arabia). The Arab Moslem Empire reached its zenith after the death of Mohammed in 632 A.D. This Empire included Palestine, the Middle East, North Africa, Spain, and a part of France. On the east side of the Middle East the Arab empire extended to the borders of India.

Palestine, in 634 A.D., was captured by Omar, an early Caliph (leader of the Moslem world). From 660-750 the Omayyads were rulers of the Moslem world with their headquarters in Damascus. During the Golden Age of the Arabs, the Abbasids (from 750-850 A.D.) had their headquarters in Baghdad.

The Crusades during the Middle Ages were fought by Christians (Crusaders) to wrest the Holy Land from the Moslems. In 1099, the Crusaders took over much of Palestine. They wanted especially the area where they believed Christ was crucified and entombed. The present day Church of the Holy Sepulchre inside the walled city of Jerusalem represented this exact place. The Church of the Holy Sepulchre was completed in 1142 A.D. Inside this Church is the Rotunda. The Rotunda houses a tomb, which the Crusaders believed to be the tomb of Christ. The place of crucifixion, anointment, and place for the three crosses are all identified inside the Church of the Holy Sepulchre. The Crusaders also wanted and captured Bethlehem where they believed Christ was born in the grotto area; a fourteen point silver star identifies the place of birth. Outside of Bethlehem, a distance of two miles, is the Shepherd's Fields, a cave, where selected devout Christians believe the birth of Christ to have been announced by angels to shepherds. Moslems, under the leadership of Saladin, a general, drove the Crusaders from the land of Palestine.

Additional structural ideas of Moslems living in Palestine include the following:

1. The Ottoman Turks ruled Palestine from 1517-1917. The present wall around Jerusalem was built in 1542 during the rule of Suleiman, the Magnificent.

2. There are seven gates, six of which are open, that lead into the walled city of Jerusalem.

3. Great Britain secured help from Palestinian Arabs to rid Palestine of Ottoman Turkish rule.

4. The Hussein-MacMahon correspondence in 1915 guaranteed Palestine to the native Arabs if they would assist Great Britain to overthrow Turkish rule. Palestinian Arabs agreed to do so.

5. Great Britain, under General Allenby, captured the land of Palestine in 1917 from the Ottoman Turks.

6. Great Britain with a League of Nations Mandate, after World War I, enforced the Balfour Declaration, to the dismay of the local Arab population. The Hussein -Mac Mahon correspondence granted independence to the Palestinian Arabs in their land of Palestine.

7. Rather heavy migration into Palestine by Jews made for feelings of suspicion and mistrust by local Palestinian Arabs.

8. Violence broke out among British soldiers attempting to enforce the Mandate.

9. Arabs opposed the United Nations Security Council resolution to divide Palestine into an Arab and a Jewish nation.

10. The United States lobbied strongly to have Palestine divided into an Arab and a Jewish nation.

11. War broke out between Jews and Arabs after the former declared statehood in May, 1948, immediately after British troops left Palestine.

12. Many Arabs became refugees as a result of the 1948 Arab-Israeli war. The Arab nations of Jordan, Syria, and Egypt fought in Palestine. Jordan annexed twenty per cent of Palestine which was the West Bank of the Jordan. Over one million Palestinians live on the West Bank.

13. The West Bank includes the walled city of old Jerusalem, Bethlehem, Hebron, Jericho, and Nablus (Samaria).

14. In 1967, Israel captured the West Bank from Jordan. Israel annexed the walled city of Jerusalem. The balance of the West Bank is occupied by the Israeli army. The 1967 war increased the number of Palestinian refugees.

15. Palestinian refugees live in Jordan, Syria, and Lebanon.

16. Skirmishes between Israel and Palestinians in Lebanon lead to the former invading the latter. Ultimately, Yassir Arafat, leader of the Palestine Liberation Organization (PLO), withdrew from Lebanon.

17. Leading refugee camps of Palestinians in Lebanon include Shattila, Sabra, and Borjel Barouj. The January 16, 1987 issue of Christian Science Monitor states there are a total of 4,000,000 Palestinians, of which 50% or 2,000,000 are registered as refugees.

18. A major problem in the Israeli-Palestinian Arab dispute is resolving the refugee problem of displaced persons. All people need to be respected.

The history of the Jews and of the Arabs has been different, thus making for cultural differences among these two peoples and groups.

## Religious Differences

The Moslem religion had its beginnings in the teachings of Mohammed (570-632 A.D.) and the written Koran, the holy book of Islam. A devout Moslem has five goals to fulfill called the Pillars of Islam.

One pillar is the giving of alms to the poor. A devout Moslem gives two and one-half per cent of income acquired to assist needy individuals. A second pillar emphasizes praying five times a day. ~~A~~muezzin, Moslem clergyman, calls the faithful to prayer. The city of Mecca, birthplace of Mohammed, is faced while praying for Sunni Moslems. Mecca is the holiest city of Islam. A third pillar is for able people to fast during the month of Ramadan. Ramadan is the holiest month (lunar) of the Moslem year. During the night food and liquids are consumed. A fourth pillar is to attend religious service in a Mosque on Friday afternoons. Friday is the holiest day of the week for devout Moslems. The fifth pillar is to say the Moslem creed of the faithful, "There is no God, but Allah, and Mohammed is his prophet."

During the month of Ramadan, devout able Moslems, at least once in their lifetime, will make a trip to Mecca. After fulfilling these requirements, the devout Moslem receives the title of Hajj. Only Sunni Moslems can go to Mecca. There are definite observances to participate in by the faithful in Mecca. In Mecca, the pilgrim walks around the Kaaba seven

times and kisses the black stone in its wall. Water is drunk from the well Zem Zem. This well, according to tradition, contains water that was provided for Hagar, the mother of Ishmael, a son of the patriarch Abraham. A visit is made to Medina, 240 miles north of Mecca, to the Mosque of Mohammed. In this Mosque, Mohammed is entombed. The pilgrimage to Mecca ends with the Festival of Sacrifice in which a goat, camel, or sheep is sacrificed and the meat given to the poor and needy.

Judaism emphasizes selected relevant ideas in their religious thought. In Jewish festivals and on the Sabbath, devout Jews say in their prayers, "Hear O Israel, the Lord our God, the Lord is One." This statement comes from Deuteronomy 6:4. The holy book of the Jews is the Pentateuch. The Pentateuch contains the first five books of the Old Testament, namely Genesis, Exodus, Leviticus, Numbers, and Deuteronomy.

Major holidays in the Jewish calendar include Rosh Hashanah. This holiday is the Jewish new year. The sound of the shofar (ram's horn) ushers in the Jewish new year.

Additional Jewish holy days include:

1. Yom Kippor, Yom Kippor is the Day for Atonement and represents the holiest day in the year for devout Jews.

2. Sukhot. This day emphasizes the Feast of Tabernacles. Sukhot recalls booths Jews lived in when wandering in the Sinai Peninsula under the leadership of Moses.

3. Hanukkah. This holy day emphasizes the Feast of Dedication in which Syrian rule was overturned in 166 B.C. The ancient Jewish temple was then rededicated.

4. Asarah B'Tebet, a day of fasting to remember the siege of Jerusalem in 587 B.C. by the Babylonians.

5. Taanit Esther, a fast day in memory of Queen Esther who saved Jews from Haman's plot to destroy them during the rule of the Persians.

6. Purim, a festival celebrating the defeat of Haman.

7. Passover. Passover is celebrated in memory of the Jewish exodus from Egyptian rule. Moses was the leader of the Exodus.

8. Shabuot, the Feast of Weeks to commemorate the receiving of the Torah on Mount Sinai.

9. Tishah B'Ab, a day of fasting to mourn the destruction of the first temple in 587 B.C. and also the second temple in 70 A.D.

## Criteria to Emphasize in Unit Teaching

There are selected standards to emphasize in developing and utilizing units in teaching-learning situations. First of all, the teacher must select significant objectives for students to attain. Trivia needs to be eliminated in teaching students. Careful consideration needs to be given to each objective in terms of stressing relevant subject matter for students to learn.

Balance among objectives needs emphasis. Thus, each category of objectives-cognitive, affective, and psychomotor-must receive adequate emphasis in ongoing lessons and units.

Quality sequence of learning opportunities must be stressed so that students may attain significant objectives. Good order of experiences assists learners to achieve more optimally. New subject matter must be preceded by prerequisite learnings so that each student may achieve as much as possible.

Meaningful subject matter needs to be presented to students. Each learner may then understand what has been taught. Inductive and deductive methods of teaching might be utilized to assist learners to comprehend, understand, and attach meaning in ongoing lessons and units.

Student interest in the curriculum motivates and encourages learning. A variety of reading and nonreading activities can stimulate students to attain optimally. Interest and motivation are powerful factors in developing the curriculum.

The psychology of education provides excellent guidelines for teachers to follow in selecting vital goals for student attainment, balance among objectives in teaching, appropriate sequence, meaningful learnings, and interest to stimulate and motivate.

## SUBJECT CENTERED VERSUS AN ACTIVITY CENTERED CURRICULUM

There are selected educators and many lay people advocating a subject centered school curriculum. Textbooks, workbooks, worksheets, as well as oral and written reports, might then be heavily emphasized in ongoing units of study. A few audio-visual aids may also be used as learning activities to clarify meanings and vary the kinds of experiences provided for learners. The teacher needs to choose vital, relevant subject matter for pupil attainment. Otherwise, pupils might learn irrelevant facts, concepts, and generalizations.

Advantages given for advocating a subject centered curriculum include the following:

1. Pupils need to acquire vital subject matter in the curriculum to prepare themselves to be effective members in society.
2. Learners develop feelings of self-discipline in acquiring significant subject matter. Effort must be put forth to learn vital content.
3. There is much subject matter available in society. Only a small part can be learned. It behooves each learner to attain as much subject matter as possible in an era of knowledge explosion.
4. Society tends to prize individuals possessing adequate subject matter knowledge. Thus, content mastery may assist individuals to be accepted more highly by other.

Subject matter selected to be taught to pupils must be 1) interesting, 2) meaningful as well as understandable, 3) purposeful and acceptable, and 4) attainable to each involved pupil.

### An Activity Centered Curriculum

There are numerous educators emphasizing the implementation of an activity centered curriculum. A variety of methods and materials might then be utilized in ongoing units of study. Learning by doing must be a key ingredient in the curriculum. Dramatic activities, art projects, creative writing, music and dance experiences, construction work, and research activities may well provide vehicles to achieve understandings, skills, and attitudinal goals being emphasized in ongoing units of study.

Advantages given for emphasizing an activity centered curriculum include the following:

1. Pupils are active, not passive individuals. Thus, an action centered curriculum needs to be emphasized.
2. Activity centered methods of teaching harmonize more with child growth and development characteristics. Each pupil generally desires to be an active participant in learning.
3. Learning experiences need to be interesting to pupils. Diverse projects and activities may well provide situations to develop learner interest in the curriculum.
4. Pupil involvement in planning, developing, and evaluating each project may guide in learners perceiving purpose or reasons for active participation in the curriculum.

#### Synthesis of Subject Matter and Action

Teachers and supervisors may think of and implement a synthesis of content and activity centered methods of teaching. The following are presented as examples on integration:

1. Pupils, with teacher guidance, reading and acquiring subject matter learnings. What has been read might then be dramatized.
2. What has been read may well be presented in art form. Art products might include murals, dioramas, and pencil sketching, among others.
3. Follow-up activities to reading might involve diverse purposes in creative writing. The purposes may include writing poetry, plays, biographies, autobiographies, myths, legends, mysteries, and adventure stories.

## Simulations and the Curriculum

Simulated experiences have been utilized for several decades by teachers. Simulations are to develop realistic experiences for students. Through stimulated activities, students experience situations resembling reality, but they are not the real world, in and of themselves. Very low risks are then involved by students in participating in simulated experiences. The traumatic, the unhappy and the sad, as well as the good, are experienced vicariously, not directly.

Teachers, in the past as well as presently, have guided students to dramatize content read from a library book or textbooks. The learner then plays the role of a character in the library book or textbook. Students attempt to feel and experience what characters in the reference books experienced. The attempt by the teacher is to have learners experience reality as much as possible, with actual risks reduced greatly or being at a zero level. Naturally, learners who are able to play the roles of characters in library books and textbooks will experience minimum risk with difficult situations experienced by characters in these reference books. Thus, in degrees, students will internalize involved feelings in role play situations.

With the use of puppetry, students may further simulate real live situations in life. A learner plays the role of a specific character as represented by the puppet. Certainly, selected learners will do a better job of role playing, as compared to others in the classroom. The intent remains in the use of puppets that

## Simulations and the Curriculum

students attempt to simulate the real, the life-like, and the concrete.

### Simulations and the Computer

Numerous classifications of software are on the market. A brief review will be given of the purpose(s) of each type of software.

A very common goal of software and microcomputer instruction is drill and practice. Drill and practice refers to review of content, previously presented to the learner. Learning opportunities involving drill and practice emphasize students retaining subject matter learned at an earlier time.

A second goal in utilizing software and the microcomputer is tutorial instruction. Tutorials emphasize new subject matter to be acquired by students. Thus, content is presented on the monitor. The learner must respond to a test item, such as a multiple choice type, to reveal comprehension covering the content. If correct, reinforcement will indicate the correctness on the screen. Generally, a second chance is given to respond correctly, if the first response given by the learner was incorrect. Based on his/her response, the student is given feedback.

A third goal in utilizing software and the microcomputer is the playing of games. Valuable learnings may be achieved through these games. Generally, several players can be at one terminal. For each correct response given by a student to an item on the screen, he/she may receive five points. The student receiving the most points wins the game. The stimuli for the diverse responses to be given by

## Simulations and the Curriculum

students may come from any academic discipline or curriculum area. Games can be challenging and interesting to students.

A fourth goal in computer technology is the use of simulations. The balance of this manuscript will emphasize the use of simulated materials. With simulated packages, students individually have a choice as to which role to play. The menu will list the diverse roles. After selection, the students plays the chosen roles throughout the program, unless the learner decides to exit from the program. For each decision to be made the student must consider alternatives. A command is typed in by the student, when ready to make a decision, based on information presented on the screen. After the command has been typed on the keyboard to indicate a choice made, the learner receives feedback. Based on the feedback, he/she is ready to respond again to stimuli presented on the screen. The stimuli again presents a problem for the role player to make a choice or decision. The student types into the microcomputer if a,b,c, or d is desired in terms of a decision. The simulation continues with the student making choices or decisions based on subject matter presented on the screen from the simulated package. Decision-making tends to avoid right or wrong answers in simulation. Rather, in degrees, there are better decisions, than others, which are made. Quality in terms of decisions come an a continuum. To be certain, a bad choice or decision can be made. The consequences of the latter kinds of decisions involve, like all decisions, low risks to learners. The bad decision is simulated, but not experienced in reality. Vicarious valuable learnings accrue. Decision-making is a definite part of life. Students need to have

## Simulations and the Curriculum

ample practice in the making of choices, based on adequate knowledge. Feedback based on the decision made is necessary. Sequential choices and decisions are made by the student based on subject matter presented on the screen.

In the software package entitled Choice or Chance (copyright 1984 Rand McNally & Company, Chicago, Illinois), the manual lists the following objectives:

- To develop an understanding of how the geography of an area affected the decisions people made, which then affected recorded history.
- To develop a sense of sequence in the events relating to history.
- To make decisions using problem solving skills, similar to those made in history.
- To creatively "rewrite" the course of history, based on the geographical factors presented at the time the decision was made.
- To review selected historical events surrounding these three time periods.

Objective number three above is the heart of the stimulated materials. The role player in the simulation makes decisions, using problem solving skills, similar to those made in history. Situations and scenes are made as life-like and real as possible for students. In Choice or Chance, the student plays the role of an early explorer. The environment in the software is as similar, as can be presented using the particular media, as possible to that of the days of early explorers.

### Criteria for Simulation Software

Teachers and administrators selecting software emphasizing simulation must go by definite criteria. Criteria must be utilized in all software selected. However, simulation needs to meet additional standards than those stressed in other kinds of software packages.

## Simulations and the Curriculum

Certainly, debugging is necessary to take care of the spelling, punctuation, capitalization, usage, and other mechanical errors. Content in software provides a model for students to emulate in terms of the mechanics in writing. Selectors of software must demand that errors in the mechanics of writing do not exist.

Secondly, learners must be able to respond frequently to stimuli in software. Much printed subject matter on the monitor with few chances to respond to questions makes for a lecture situation. Textbooks and library books may present the subject matter in this manner much more effectively than can software content on the monitor. Learners then need to respond frequently to problems/questions in simulated programs.

An adequate number of simulations need to be available in any classroom. Simulated materials must be on the understanding level of students. They need to relate directly to a unit of study being emphasized in the curriculum. The teacher could teach an entire unit on problem solving using simulations. Sequentially, students learn problem solving skills from the different programs involving simulations. Software and nonsoftware programs of study could be used in these units of study. An adequate number of computers need to be available so each student may achieve in an optimal manner.

The classroom teacher, needs to be highly knowledgeable about the subject matter, sequence of presentation, and needed response to be made by students in the software programs. He/she must be on the lookout continuously for new simulations which stimulate and motivate learners.

## Simulations and the Curriculum

Software must be catalogued in a manner whereby its retrieval is easy for teachers to utilize in a classroom. Red tape and cumbersome methods of securing software for students need to be eliminated. Easy access is a key concept in utilizing simulations effectively in the curriculum. Software involving simulation must meet the interest, needs, and purposes of involved learners.

The teacher needs to be a good manager of student time devoted to simulation usage. Time on task is important. The effective organization of students to use computer time wisely is important. Wasting time in computer utilization, as well as discipline problems of students, hinders the wise use of time for instruction. When problems and difficulties arise in computer and software use, the teacher must know how to proceed. An unskilled teacher in organizing students for instruction, as well as in using the computer, is a handicap in any instructional program involving the use of simulations.

Simulated programs in software should be utilized with other materials of instruction. The latter types of materials include textbooks, workbooks, worksheets, films, filmstrips, slides, tapes, instructional television, and video discs. Adequate data needs to be available so that the learner may attain optimally using software programs involving simulations.

Printouts of completed results can be important to students. If the microcomputer has a printer, each student might then look at the results to learn from subject matter presented previously. Increased background information is then available to learners. Growth in learning should be sequential and cumulative.

## Simulations and the Curriculum

Balance among objectives needs to be achieved by students when using microcomputer terminals. Subject matter containing facts, concepts, and generalizations is inherent in simulation programs. Understandings objectives may then be achieved by students. A second category of objectives—skills—is a major category of ends for students to attain in using simulated programs. Relevant skills include problem solving, decision-making, hypothesizing, making judgements, evaluating content needed to make the next sequential choice, and working harmoniously with others in committee settings involving the use of simulations. A third category of objectives—attitudes—emphasizes students enjoying, liking, and feeling positive toward the utilization of simulations as an important means of learning.

Wright and Forcier<sup>1</sup> developed the following evaluation form to appraise software quality:

### Course Evaluation Form #3

Program name: \_\_\_\_\_

Indicate all that apply with yes or no:

Drill and Practice \_\_\_\_\_ Tutorial \_\_\_\_\_

Simulation \_\_\_\_\_ Tool \_\_\_\_\_

#### Interaction

\_\_\_\_\_ 1. Program is personalized

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<sup>1</sup>Edward B. Wright and Richard E. Forcier, The Computer: A Tool for the Teacher. Delmont, California: Wadsworth Publishing company, 1985, page 160.

## Simulations and the Curriculum

- \_\_\_ 2. User can stop at any time
- \_\_\_ 3. User can see score at any time
- \_\_\_ 4. User can select level of difficulty
- \_\_\_ 5. User can review instructions
- \_\_\_ 6. User can review past mistakes
- \_\_\_ 7. User goes at own speed
- \_\_\_ 8. Testing occurs periodically during program
- \_\_\_ 9. Program can select level of difficulty through testing

## Content

- \_\_\_ 1. Appropriate subject matter
- \_\_\_ 2. Appropriate for grade level suggested
- \_\_\_ 3. No implied racial or sexual discrimination
- \_\_\_ 4. Can reteach principles
- \_\_\_ 5. Meets objectives (teaches what it is supposed to)
- \_\_\_ 6. Applicable to more than one subject
- \_\_\_ 7. Presents correct information
- \_\_\_ 8. Program is interesting
- \_\_\_ 9. Program is involving
- \_\_\_ 10. Program is realistic
- \_\_\_ 11. Program is educationally sound

## Teacher Developed Simulations

There are selected educators recommending teachers developing their own simulation programs. The classroom teacher is in the best possible position to know what students are ready for in terms of

new learnings. Readiness for a new task must be in evidence for individual pupils to benefit from new content being presented on the screen.

The teacher should also be in the best position to know which learnings students can attain sequentially. If a new step in learning is too complex, the involved student may experience failure. Reinforcement in learning is then not in evidence. A problem that teachers do face, more so than a publishing company of software, is the time and money necessary to debug a program. Thus, a professional programmer can use pilot studies in determining at which step or steps a program is not sequential. In the pilot studies, students may reveal at which point the next step of learning was too complex. This is not to say that commercial companies do quality work in debugging a program. The opportunities to do so, however, are more in existence as compared to a classroom teacher who teaches full time and writes one or more programs on weekends or after school hours. Kemp and Dayton<sup>2</sup> wrote:

Unlike human beings, computers are very particular about the accuracy of the instructions they receive. A single misplaced letter or symbol can render a computer program useless as an instructional tool. Therefore it is very important that CBI materials be thoroughly tested before they are released for broad use.

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<sup>2</sup>Jerrold E. Kemp and Deane K. Dayton, Planning and Producing Instructional Media. Fifth ed. New York: Harper and Row, Publishers, 1985, page 255.

Errors such as these are called "bugs" and the process by which they are located and removed is called debugging. This is best accomplished by letting a variety of people try the materials to see what types of problems might occur. Ideally these people should be representative of the learners for whom the materials are designed and should go through the materials under the anticipated circumstances for their use. They should be asked to work through the program several times, trying all of the options, so that each branch can be tested. In addition, they should judge the effectiveness of the instructions and the clarity of the documentation.

Programs written by a teacher can definitely fit in to an ongoing lesson or unit. The contents in the program are then related to objectives emphasized in the curriculum. It will be more difficult to secure from a commercial company software that sequentially harmonizes with present teaching and learning objectives emphasized in the classroom. However, quality software is increasing in number in schools whereby choices of content can be made which definitely relates to what is presently being taught in the curriculum.

Time is an important consideration for any teacher. Teaching is a demanding profession. Much energy goes into quality instruction in any classroom. Energy may not be available to develop programs by instructors. The "adding on" concept to a teachers load might well distract from a teacher's ability and performance in teaching. Commercial companies hire programmers to write, edit, evaluate, and produce course software. Administrators and supervisors in schools need to emphasize the nomothetic (needs of the institution or schools and their goals), as well as the ideographic (personal needs of teachers) dimension. A balance

## Simulations and the Curriculum

needs to be emphasized between the objectives of the school and objectives of human beings.

## In Conclusion

There are numerous issues involved in the utilization of simulations. Certainly, modern technology is here to stay and will continue to change the quality of simulated materials. Hopefully, the changes will be for the good. Students individually need to achieve as much as possible in the curriculum. Microcomputer instruction may well be a means to guide students to achieve course goals more effectively. The use of simulated materials will assist students to achieve higher cognitive level objectives. What will aid students to achieve and progress continuously?

1. Each learner needs to be successful in learning by experiencing quality sequence in ongoing simulation programs.
2. Reasons or purpose need to be inherent in diverse learning activities involving the utilization of simulated materials.
3. Challenging, interesting experiences need to be in the offing for pupils.
4. Adequate provisions need to be made for slow average, and fast achievers in an atmosphere of respect.
5. Students must understand and attach meaning to what is being learned in each simulation.
6. Learners need to experience balance in the

curriculum. Thus, understandings, skills, and attitudinal goals need to be stressed adequately in the simulation curriculum.

#### Selected References

Dennis, J. Richard and Kansky, Robert J. Instructional Computing. Glenview, Illinois: Scott, Foresman and Company, 1984.

Kemp, Jerrold E. and Dayton, Deane K. Planning and Producing Instructional Media. Fifth ed. New York: Harper & Row, Publishers, 1985.

Wright, Edward B. and Forcier, Richard E. The Computer: A Tool for the Teacher. Belmont, California: Wadsworth Publishing Company, 1985.