Friedrich Froebel, an early advocate of the use of play in kindergarten teaching, argued that the ultimate goal of education was developing the creative person. According to Froebel, teachers could promote creativity through play by using gifts, occupations, and mother play songs. By contrast, Johann Herbart called for a subject centered curriculum. He recommended literature and history as the two leading academic study areas and asserted that the goal of instruction was to develop the moral individual. Herbart called upon teachers to take students sequentially through the steps of preparation, presentation, association, generalization, and use.

It is possible to bring together the two approaches through an instructional method that applies practical problem solving to academic subjects. Problem solving through play activities can generate interest in learning. A model for problem solving may include: (1) identifying and delineating a problem; (2) gathering data; (3) achieving a hypothesis; (4) testing the hypothesis; and (5) revising the hypothesis. Problem solving stresses finding solutions to lifelike situations. As the problems are relevant to society, school, and society might become one and not separate entities.
Friedrich Froebel (1782-1852) was an early advocate of play in teaching kindergarten pupils in the school setting. The ultimate goal of education, according to Froebel, was developing the creative person. Three kinds of learning activities involving play would assist pupils to become creative beings. These activities were:

1. using of gifts. Froebel had his own definition of gifts. A large cube could be taken apart to develop smaller cubes. The smaller cubes could be put back together again to develop the large cube. A large cylinder had smaller cylinders inside of it. These could be taken apart and put together again. Physical representations of lines, planes, and points were also used as teaching materials by Froebel. What could pupils do with the gifts? The cubes could be manipulated. Model scenes could be made. Creative endeavors were of utmost importance in using the gifts. The teacher's objective was to keep harmful influences away from pupils so that play within the framework of creativity was possible.

2. using of occupations. Here pupils changed the shape or form of materials such as in clay modeling. Other occupations included cutting designs from paper, making colored designs on paper, and bead stringing.

3. using mother play songs. Pupils would creatively dramatize ideas presented in the songs.

Somewhat toward the other end of the continuum, Johann Herbart (1776-1841) advocated a subject center curriculum. Literature and
history were the two leading academic areas of study for students, as recommended by Herbart. The major goal of instruction here was to develop the moral individual. With a study of the lives of moral individuals in literature and history, students received a model to guide their lives.

To further stress the academic for student achievement, Herbart had the following sequential steps that teachers should follow in teaching:

1. preparation. Students would review that which had been presented by the teacher previously.
2. presentation. New subject matter was presented to students.
3. association. The teacher taught students to relate the steps of presentation with preparation. Fewer isolated ideas would then be in the mind of the student.
4. generalization. Students developed broad ideas or conclusions from these associations.
5. use. The teacher taught learners to apply in different ways what had been learned previously.

Herbart believed that the mind was like a blank sheet and the environment (teaching situations) printed thereon. The Tabula Rasa theory, mind like an initial blank sheet, was a central idea in the educational thinking of Johann Herbart.

Throughout educational history, diverse issues have been emphasized. One issue pertains to an activity centered curriculum, as
advocated in part by Friedrich Froebel, versus an academic course of study, as presented by Johann Herbart.

Play and an Activity Centered Curriculum

Activity centered curricula emphasize a hands on approach to learning. Concrete materials (objects, realia, excursions, models, and things) are utilized initially in teaching. From the concrete to the abstract follows in sequence with learning opportunities for students. A hands on approach with concrete materials tends to move in the direction of play activities. However, not all manipulative activities involving the use of concrete materials represent the concept of play. The psychomotor dimension, rather than the exclusive utilization of the cognitive domain, is inherent in play experiences in the curriculum.

With play activities, interest should be generated in learning. Thus, the learner and the curriculum become one. The inherent interests in learning then make for effort to achieve. If students perceive purpose in play experiences, reasons will exist for learning. Reasons will be there to achieve goals on the part of learners. The play activities are not frivolous, nor anarchical. Rather, the purposes are to attain the worthwhile and the useful. Creativity, novelty and uniqueness, are still paramount within the goals or objectives for student attainment. The ends may shift and change, as ongoing activities progress.
Students need to attach meaning to pursued play activities. Personal meanings are important, as well as understanding inherent activities and experiences.

A long time debate has been in evidence for sometime in that what is learned should be valued intrinsically versus what is learned should be instrumental to the solving of problems. Knowledge valued for its own sake goes back to the thinking of Aristotle (384-322 BC) in ancient Athens. Knowledge being instrumental or useful to the solving of problems was advocated by John Dewey (1859-1952). Play activities directed to the ultimate goal of developing the creative person may emphasize both knowledge acquired for its own sake, as well as knowledge being instrumental to the solving of specific, identified problems.

With problem solving, flexible steps, not absolutes, may be identified. There is not absolute agreement on the flexible steps of problem solving. A model for problem solving may include

1. identifying and delimiting a clearly chosen problem.
2. gathering data to secure needed information, directly related to the problem
3. achieving a hypothesis.
4. testing the hypothesis.
5. revising the original hypothesis, if needed.

Problem solving stresses finding solutions to life-like situations. The problems are relevant in society. The school curriculum and society might then become one and not separate entities.
Play activities may well assist to solve problems and emphasize reality in the curriculum. Thus, in studying Medieval times in the social studies, students with teacher guidance may plan and present in creative dramatics form a day in the life of a knight, nobleman, serf, and guild member. A model castle, moat, and drawbridge may be made to stress further reality in the curriculum. In arithmetic, students with teacher assistance may develop a model supermarket. Empty fruit and vegetable containers, as well as empty cereal boxes, among others, may be placed on a shelf with attached prices. Students purchase goods using toy money. Addition, subtraction, multiplication, and division are emphasized. In science rain gauges, barometers, hygrometers, anemometers, and thermometers may be planned and made by students with teacher supervision. The rain gauge may then be utilized to measure amounts of precipitation. Reality based learnings are involved with the use of concrete materials. Play herein may certainly be stressed as a learning opportunity. In the literature curriculum, students with teacher help may write play parts pertaining to a literary selection. Students may choose the play part to practice and read in the final presentation. Costumes and scenery, among other items, may be made to enhance the production and make it more reality based.

More specifically, the following truly reflect the playing of games to achieve open ended goals and objectives.

1. software which emphasizes playing a game in spelling. In an atmosphere of respect four students may play the spelling game. Easier
words chosen to spell a word correctly are worth five points. Twenty points are awarded to a speller who spells a complex word correctly. In between, a word may be worth ten or fifteen points depending upon their complexity, if spelled correctly. The student with the highest score wins the computerized game in spelling.

2. a commercial or teachermade spelling game. The game has a spinner, a game board to move forward selected spaces, and a spelling word on each card face downward. Thus, for example, a pupil spins the spinner and it points to three. The learner can move forward three spaces on the gameboard if he/she spells the word correctly on the top card viewed and pronounced by an opponent. A player may only move forward the number of spaces shown by the spinner, if he/she spells the word correctly on the card pronounced by the opponent.

A Subject Centered Curriculum

Somewhat toward the other end of the continuum, a subject centered curriculum may be in evidence. Measurably stated, predetermined objectives are chosen for students to achieve. The subject matter comes from a basal textbook, related workbook pages, and audio-visual materials. Abstract learnings receive preference, as compared to the concrete and semiconcrete. Mental development of students becomes paramount. Cognitive, rather than affective and psychomotor, objectives receive primary stress in teaching-learning situations. Facts, concepts, and generalizations are truly salient for students to acquire
in ongoing lessons and units of study. Rigorous subject matter content is taught. Continual monitoring of student progress is emphasized. Time on task to insure optimal student progress receives careful consideration. Student progress is measured rather continuously using criterion referenced (CRT's), as well as standardized tests. Student achievement on CRT's and standardized tests is valued highly. Doing better on tests is a major objective for students to attain. Principals and supervisors show high visibility in the school and classroom setting to assist teachers to do a better job of teaching subject matter. Formal classroom settings emphasizing rather strict standards of discipline are in evidence.

In Closing

Friedrich Froebel (1782-1852) and Johann Herbart (1776-1841) differed much in educational philosophy. Froebel believed strongly in pupils being creative in ongoing lessons. Herbart advocated the teaching of subject matter. Within the framework of creativity, Froebel stressed play as a major way of learning. Literature and history were the two major academic disciplines advocated by Herbart in having students learn subject matter.

The debate still rages today in terms of stressing play and an activity centered curriculum vs. academic content for student acquisition. The writer recommends resolving the debate between an activity centered versus a subject area curriculum with a problem
solving philosophy. Subject matter might then be utilized to solve problems. These problems are real and life-like, identified and solved by students with teacher guidance.