# **Please Pass the Curriculum**

A Guide to Project-Based Learning with Lesson-Plan Models

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## **Curriculum Assumptions**

Curriculum is not what is contained in a guide or in a book. Curriculum represents the body of concepts (standards) required at a certain level and expressed through materials and activities which engage students.

Anything can be taught with anything. Good curriculum can be implemented with no results. Weak curriculum can be implemented with extraordinary results, depending on other variables. The creative skills and ingenuity of the teacher are essential in the learning environment. If the students and teacher are fully engaged in the process, there is a great likelihood that learning will take place. The job of the teacher is to know those few major curriculum concepts in each subject area which need to be developed by students at the level involved and be sure that valid concepts are made a part of learning activities.

# Approach

Students of all ages learn best and retain material longest if they are actively involved in a process while learning.

The learning process evolves and "snowballs" when it includes activities for all learning styles and when it engages the emotions and intelligences (Gardner) of students. Learners need to read, write, work together and alone, compute, and research, but they also need to be active. They need 'hands-on' activities. Brainbased learning research indicates that this approach is far more effective than book-based learning alone.

Learners also benefit from a periodic public display of accomplishments. The public can be the class, other classes, the school, the parents and/or the community. Wherever possible, student activities should involve parents and other parts of the community in their activities.

#### What about Standards?

Standards represent the expected knowledge to be attained by students in various fields. They state outcomes to be achieved by students in schools. There is nothing wrong with standards. Students and instructors both need targets to be met. In addition, standards tend to be very accessible and reasonable. The major concepts stated in math standards for the past then years, for example, are not difficult to achieve and can be taught through any number of activities. However, limiting mathematics to textbooks and worksheets insures that math will be poorly taught and poorly learned. When students know why they need a skill, they learn it quicker and better. The same process is true for science, language arts, social studies, and all other subjects.

The teacher's job is to set up situations so the students see that they need those

skills and set out to learn them on their own, with the help of other students, with the help of parents or other family members, and with the support and guidance of the teacher. It is important that the skills *are* learned, not where or how they are learned or even from whom.

There are a number of life skills/awareness which transcend subject areas. Bruner outlined some in a social studies curriculum he worked on titled Man: A Course of Study. In that curriculum he emphasized the concepts of 1) same and different, 2) structure and function, 3) cause and effect, and 4) patterns. Throughout that curriculum, in all activities and in all subject areas, those four concepts were brought to students' attention. By this attention, the curriculum became less fragmented and the interrelationship of subjects became more obvious, encouraging transfer of concepts from one activity to another. Concepts learned in math could be used in social studies, those learned in music could be used in science. The emphasis became how man perceives and deals with his/her surroundings.

Again, curriculum is not what is found in the curriculum guide. It is not the book from the publisher, the guide from the district or the school or the Society for the Improvement of Science. Curriculum is what is in the mind of the teacher, and later becomes what is in the mind of the student.

Therefore, the ideas presented on the following pages are just that - ideas. They are not fully developed and cannot be followed step by step. They are presented in outline, leaving big gaps that the teacher and students have to fill in. They are meant to spark ideas rather than be followed as presented. Note also that they are conceived as taking place over an extended period of time. They are unit ideas, not daily lesson plans. The teacher will have to find something else to turn in to administration as lesson plans, but may be able to find some ideas to excite meaningful student learning in what is presented.

Just as the curriculum ideas that follow may serve as a guide for teacher development, the students themselves will serve as a guide for curriculum development. Broad topics for semester long units define the concepts. How they are accomplished is not predetermined for the learners. The teacher has the concepts in mind of what has to be learned this year, but the students can and should help determine the specific curriculum, the means of getting there.

Most often teachers keep the year's goals from the students. This seems foolish. If the students know where they are going, what is required of them by the end of the year, they can help get there. They can be made responsible for their own learning individually and as a group if they are given the goals from the beginning. If the goals are conceptual and activity oriented, they could even be given the content of the testing devices at the beginning of the year without compromising learning. In this manner learning can be maximized and cheating becomes

impossible, or at least difficult.

## Why Schools?

The purpose of schools is not only to teach the traditional subjects. In fact, the reason schools were developed in the United States was to develop an "informed electorate." In addition to math, science, social studies, language arts, art, music and PE, the schools are responsible for developing responsible and informed adults ready to assume the activities and responsibility of citizenship in the community. The core subjects are important, but so are developing responsibility, decision making, higher order thinking skills, social and environmental responsibility, entrepreneurship, teamwork, discipline, perseverance. Teachers, though, have been confounded by the minimum daily requirements imposed by governing agencies for time spent in the core subjects. Teachers have complained that these requirements do not allow for time in other important areas. The way to develop student responsibility is to give students opportunities to be responsible and to produce results. Perseverance is developed internally in students, by being encouraged to persevere and by seeing the success it produces. Discipline is best when it comes form an internal locus of control rather than from an outside "policeman" in the classroom. Students are much more likely to follow the rules if they "want" to than if they are "forced" to. By showing how it is to their advantage to cause fewer problems, the need for "policemen" decreases.

Real life situations do not divide themselves into math activities separate from language arts activities separate from science activities. Real life situations are integrated, necessitating people who can easily and fluidly move from one subject area activity to another. The measuring, evaluating, estimating, ordering materials, telephoning, report writing, and much more all flow together.

Schools can be similar. Through instructional practices based on projects that students understand or develop, school becomes practice for processes outside of school. School begins to mirror real life. Thinking skills, addition facts, decision making, and socialization can all be developed at the same time, by project activities. The artificiality of stopping an activity just when it became interesting to take out the books for the next subject or go to the next class at the end of the hour doesn't have to happen.

Surveys of parents, community members, and school personnel over several years indicate that they feel the essential goal of schools in today's society is to give students skills in the following four areas. 1) learning how to learn. 2) being able to earn a living, be self sufficient. 3) getting along with others--family, peers, bosses. 4) being able to get along in any social and physical environment in which they find themselves. To accomplish these goals, schools must rethink their curriculum materials as well as their instructional approaches.

Family involvement in the education of a person is essential, especially in schoolage children, and is recognized by schools throughout the country. Unfortunately most schools see parental involvement as a responsibility of parents to come to the school and/or provide what amounts to tutoring of students at home.

The key element to begin to involve family in the learning process is getting school personnel out into the community and into the homes of students. The first element of family involvement is getting teachers to see where and with whom students live. Home visits have proved most successful in improving parental involvement in Scottsdale as on Indian Reservations. In Scottsdale teachers were put on salary two weeks before the school year started simply to do home visits. They met parents, students and siblings on their own ground. Often they shared a meal. On the reservation, home visits were begun for all students in the school at the beginning of the school year. These visits are credited with reduced classroom discipline, increased parental involvement in the educational process and school activities, and increased ability of the teacher to deal with specific student needs. The teacher became a friend, someone who could just drop by. It is more difficult for students to cause problems to someone with that sort of family relationship. It is also more difficult for teachers to just "write off" a student whose parents are friends. In adult education, family involvement is no less important. Instructors need to connect with the environment surrounding a student's life. In that way, learning is integrated into a larger framework with the student at its center.

# **Helping It Work**

Following are suggestions for implementing project-based instruction that invite participation of the community and family of learners. They are simple models, not rigid instructions. The structure provided in each unit can and should be modified to engage learners in different environment. As the ideas are implemented, it is important to consider the importance of learning styles and multiple intelligences in the learning process. Good instruction tends to emulate a good menu – the greater the variety around a basic concept, the greater the benefit to the participants.