Developing Situational Learning Events: A Practical Merger of Real-Life Events with Content Instruction.

This paper discusses the value of merging real-life events with content instruction and provides six sample lessons to illustrate such instruction. A brief review of the literature notes historic recognition of the importance of applied learning, the issue of retention and transfer of learning, the approach of using content relevant experiences within which new skills are grounded, and the use of students' experiences as a source of intrinsic motivation. The ready availability of instructional materials appropriate to this approach, such as newspapers, magazines, advertisements, etc., is noted. The six examples include two lessons contained within the classroom and four that begin in the classroom but extend far beyond it. The lessons address the subject areas of mathematics, language arts, art, social studies, photography, computers, grammar, and composition. The lessons have the following titles: (1) "Cooking For..."; (2) "School Newspaper Production"; (3) "City, County, and State Newspapers"; (4) "Wooden Working"; (5) "Wrinkle Painting T-Shirts"; and (6) "Political Cartoons." (Contains 11 references.) (DB)
DEVELOPING SITUATIONAL LEARNING EVENTS:
A PRACTICAL MERGER OF REAL-LIFE EVENTS
WITH CONTENT INSTRUCTION

Why do I have to learn this?
What good is this going to do me?

Mantras such as these can be heard in the hallways and classroom throughout the world. The practical and integrative use of many skills students are required to learn are not inherent in the classroom lessons. The issue is often not the usefulness of the skill to daily life, but a lack of connection between the classroom instruction and the reality of students’ daily life. The following article is designed to provide guidance in not only integrating classroom taught skills into students’ lives, but to use daily life activities to actually teach academic skills.

"Children learn for the sake of learning; their minds seek knowledge like the eye seeks light" (Locke, 1693 p. 118-119). Learning is not a difficult process. All children learn to communicate, develop motor skills, internalize social mores, etc., all before school age. However, one important distinction between all these pre-school age skills is that the child had an inherent "need" to develop these skills. Once a child reaches school age the "need" element is often separated from the academic instruction. There would be little argument that good writers need to intimately know the parts of speech. In schools today the eight parts of speech are taught almost universally but the practical nature and immediate application are absent in many classrooms. The immediate use of the new skill has been replaced with worksheets and a promise that someday the students will value the instruction. Unfortunately, when the student does reach a point where knowledge of nouns could be useful, the rote recall fails to offer a practical solution.

The practical application of academic instruction is not a new issue to education. While Locke recognized the connection in the 1690's, more contemporary scholars are voicing the same concerns. Bloom (1976; 1971) in the development of the Taxonomy of Cognitive Objectives noted that Knowledge and Comprehension, the lowest levels of knowing, are more passive. The active levels of learning begin with the Application level and as such promote all the higher levels. When a young person is learning to drive an automobile a parent or school system would be negligent if they stopped the instruction with the teaching of the Driving Manual. The student must get behind the wheel with a mentor to guide and facilitate their skills development if he/she is to become a competent driver. Bloom also indicates that if a person is given instruction with Application of the skill as a focus, the student will go on to use the skill in Analytic, Synthesis, and Evaluative ways once he/she has mastery of the skill. The implication being that the more a student uses and masters a skill the more advanced his/her thinking becomes, which is the goal of all quality education programs.

Gagne', Briggs, and Wager (1988) noted that the things students should know and more directly know how to do often do not resemble the subject categories in a school system. Gagne' contends that the human activities which schools are responsible for teaching are derived from societal needs. However, the instructional process must translate the societal needs into academic goals and then provide an instructional process. One of Gagnes' Instructional Events, the nine events that constitute an effective lesson, specifically addresses the process of retention and transfer. He notes that instruction should include a means by which information and processes can be retrieved for practical use. Effective teachers challenge students to actively use the information they possess to
interact in a variety of practical contexts. Thus a variety of context for learning becomes a vital precondition for the skills to effectively bridge the chasm from the classroom to life and societal skills (Gagne' & Driscoll; 1988).

Madaline Hunter (1982) stressed the importance of using experiences from the students’ lives to make learning meaningful. Her emphasis was on using content relevant experiences within which new skills could be grounded. This previous experience gave a context from which the new skill could be embedded and elaborated. Hunter noted that, “Transfer is one of the most powerful principles of learning” (p. 107). The student’s prior knowledge influences the way new skills and information is processed and in turn impacts the student’s ability to use the new information in current and future situations. While not all students enter the classroom with equivalent experiences it is important that the instruction ties the new skill to what the student has experienced and at the same time provide an enriched contextual experience within the classroom.

When students can identify with a skill’s practical application to life experiences, prior or current, the intrinsic motivation factor increases (Brophy, 1998). Brophy notes that the use of characters with which the students can identify, use of novelty and unusual content, things that are important to students in their lives outside the school environment, and content that evokes intense emotions are all effective ways to focus student motivation. Students’ motivating can be aroused by student-centered content; this is a bonus to the impact contextual embedding of skills has on the learning.

By exposing students to situations that take advantage of their natural curiosity learning can be promoted. Kamii (1985) citing Piaget’s work noted that children are motivated to construct knowledge for themselves and that the constructed relationship (logico-mathematical) based on interaction (sensory based) with the physical environment is much more important than any empirical learning. For example, when a toy manufacturer makes a product they create many near-identical toys. However, when a child gets one of the toys and plays with it and develops an experience base with that particular toy it is no longer like all the rest. To an outsider it may appear that all the toys are alike but the child knows better. When a student constructs a concept that rational learning has a profound and lasting impact on the student cognitive structure and hence life decision making tools. Educators have a choice of constructing the information for the students and trying to coerce them to ingest it or develop an environment where students can actively construct their own understanding of a concept.

All of the above theorists and researchers found that learning within a contextual environment is not only more motivating but also more effective. They also note that the more relevant the context is to the students’ past and present life experiences the more effective the learning and the more divergent the students’ ability to use the skill in the future. Based on these findings a systematic process began to develop lessons that incorporated students’ past experiences in designing learning activities that would emulate the real world experiences students encounter while at the same time teaching core content skills. The goal in developing content activities was not only to incorporate contextual skills from student experiences but to make the learning experience as reality based as possible.

One of the practical benefits of contextual based assignments is that materials are typically readily available and in many cases come straight from the students. Newspapers, magazines, businesses, etc. are readily available sources. Students are constantly bombarded with pieces of information that provide highly motivating opportunities for content teachers. A recent advertisement had two-liter Coca-Cola bottles on sale for $0.99 for the first two and then back to the regular price of $1.39 for each additional bottle. Such simple, common advertisement offers teachers great fodder for creating a content rich curriculum. The interest factor and relevance to the students’ world is an integral part of the dance that occurs in highly effective classrooms.

The first and second examples below are designed to model lessons that are contained within the classroom. Examples three through five begin in the classroom but extend far past the normal boundaries.
Title: Cooking For...
Content Area(s): Mathematics and Language Arts
Description: Students are given a variety of bowls with the dry no-bake cheesecake or jello type mixes already poured into each. They are then given the box with the directions on it. Each bowl contains 1.5 to 5.3/4 mixes. The students, working in pairs, must determine through weight how many mixes are in their bowl and then multiply the other required ingredients appropriately. The bonus to this process is that when they finish the product they get to eat their assignment. The drawback is that if they do not calculate it carefully their treats are less than delightful. Students kept a log of their thoughts and how a decision was made on what ratios were used. They concluded the activity with a "tasting essay" that consisted of a complete description of the activity and the varied tastes of success.

Title: School Newspaper Production
Content Area(s): Language Arts, Math, Art, Social Studies, and Photography
Description: Students in four Language Arts classes began writing and publishing a Middle School newspaper on a weekly basis. Each class would put out one edition a month that included current events in the school, moments in history, book and movie reviews, community events, sports, a classified section, and original cartoons. Each edition would also include two supplemental sections that were pertinent to the interests of the students that were writing that particular edition. The high school yearbook staff also provided valuable support and mentoring to the middle school students.

Title: City, County, & State Newspapers
Content Area(s): Mathematics, Language Arts, Computer, Social Studies, and Art.
Description: Students review on a weekly basis, stories from the local, county, and a statewide newspaper. The students read and analyze the different writing styles and where the emphasis is placed regarding the information that is included in articles from each news source. Students also kept track of the different types of articles that were written as well as the weather and other demographic information. Their observations are then charted and graphed using standard paper and pencil techniques as well as spreadsheets. The data is discussed and written about in their weekly journals. A lot of the problems and situations that are used in the daily instruction are also derived from the newspapers and the supplemental inserts. Contrasting newspapers as a class project helps students become aware of what is happening in the world around them as well as how to be a wise consumer of news stories.
Title: Wooden Working
Content Area(s): Math, Art, & Language Arts
Description: Students working with geometry content were given a series of patterns taken from magazines, tracing, rubbings, etc. The students then adjusted the patterns proportionally to fit 1" x 6" x 10" wooden blocks. The transfers were then cut out with a safety-scroll saw and the students painted the designs. After the initial set was constructed students began designing their own patterns. As the students completed each pattern they would write up a “personalized” history for the pattern and subsequent product. In the spring of the designs became more complex as students began designing and building uniquely designed birdhouses. Students had to do research on the different types of birds, preferred habitats, and nesting behaviors. The birdhouses were then constructed based on their research. A personalized history of the birdhouse was written as well as a brief review of the species of bird it was designed to attract. The birdhouses and toys were sold at various school functions as well as donating them to local organizations.

The funds raised by these activities were managed by the students, with the help of a local banker. Each year the students paid for their own fieldtrips, special events, and made a yearly purchase of plants for spring landscaping at the school.

Title: Wrinkle Painting T-Shirts
Content Area(s): Mathematics, Art, and Grammar & Composition
Description: Wrinkle painting is a process that uses directional spray of paints onto an artificial topography created by wadding or swirling material (Palmer, 199x; Salyer, Palmer, McCarthy, & Necco, 1996). The students utilized the wrinkle painting process and became quite talented in creating unique designs. Students then began to sell their wrinkle painted T-shirt at school events and even local businesses. The students were in charge of ordering materials, production, marketing, and the financial management of the proceeds. These proceeds were then used to pay for class fieldtrips and classroom activities. The students utilized their classroom math, art, grammar, and composition skills in a practical and meaningful way.

Title: Political Cartoons
Content Area(s): Social Studies, Art, and Language Arts
Description: Student study political cartoons from the newspapers and magazines. After doing a review of political cartoons and researching the cartoons of different times in history, students begin drawing their own cartoons. The cartoons are accompanied by the relevant story that inspired the creation of the cartoon. Students refine the drawings with the help of mentors from the local art and newspaper world. The students create journals that represent their feelings about the news stories that inspired each cartoon. A copy of the original news story(ies), a copy of the student’s journal entry, and a signed copy of the cartoon is then put on exhibit as well as made available for sale. All proceeds from the art show and subsequent sales can be used to fund additional student-selected projects.
While it is well noted and accepted that situational learning is a more time consuming approach to knowledge it is arguably a much more direct path to wisdom. Rousseau noted in Emile that the most important and useful rule of education is "Do not save time, but lose it . . . " (1762, p. 67). This is true today more than ever, as education faces the demands of high-stakes testing and content standards. The efficiency methods of teaching children knowledge is not, in the long run, effective in developing the wisdom for life. The situational learning events noted in this paper are not replacements for the curriculum currently in use but a way to integrate the skills of current knowledge base curriculum into the world of practical use, in hopes of promoting the development of the person and not just academic content.

The works of theorist such as Locke, Gagne, and Piaget encourage teachers to recognize the active nature of children in designing curriculum, especially daily classroom learning activities. Lessons that are designed not only to actively engage students in the learning but to create learning situation where students are developing the social competencies required for their life outside of the school building. By integrating student interests, life skills, and academic curriculum into self-contained units or longitudinal projects is essential if students are to become emotionally immersed in learning. Application learning that involved life skills provides a motivational impetus to develop new skills and continue to hone existing skills in a way that textbooks, drill and practice, and paper/pencil testing cannot. What teacher would not love to have class after class of students that are excited about the work they are doing and strive constantly to improve their previous effort. Real-life project based education has the capability to produce such classes.

References


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