Teacher Created Materials
PUBLISHING

Research-Based Curriculum
Teacher Created Materials
Exploring History & Primary Sources

Supplemental History Programs to Bridge the Achievement Gap

Introduction

Traditionally the teaching of social studies/history has focused primarily on the rote memorization of important facts and dates. The materials used to support this instruction have been textbooks. However, developments in the past ten years have led to major changes in the methodology used to teach these subjects. These changes came as the result of the assimilation of research on effective teaching practices and the development of comprehensive standards for social studies and history. This document describes the research base of Teacher Created Materials' *Exploring History* and *Primary Sources* programs and explains the program components that were developed from this research.

Teacher Created Materials has created a series of supplemental programs designed to support effective instruction and close the achievement gap evidenced in schools around the country. The research evidence compiled from the past thirty years of studies shows that students who are not achieving to their potential require different teaching strategies. These strategies include: incorporation of multiple intelligences, multi-modal learning, integrated learning, open-ended activities, and small group instruction. In addition to teaching strategies, curriculum programs must be designed to include both content and process standards. Teacher Created Materials has followed national and state content standards when creating the *Exploring History* and *Primary Sources* programs. Process standards were developed from existing research by respected consultant Dr. Andi Stix. These standards include: brainstorming, discussion, deductive reasoning, and art and language arts integration. Research has also shown effective programs include assessment that drives instruction. A variety of assessments were included in the program to assess students' content knowledge and process skills.

Active, Engaged Learning

Exploring History simulations invite students to experience an integrated approach to active learning where they are immersed in the challenges of simulations, debates, activities, and discussions. *Primary Sources* involve students in role playing and research to solve a problem. Multiple research studies have proven that students who are actively engaged in learning retain information more effectively and perform higher on standardized tests (Gardner, 1983 & Baker, 1989). The lessons in *Exploring History* and *Primary Sources* were designed based on specific recommendations in the research. For example, the Magnetic Debate activity found in the World War I, World War II, Ancient Greece, and Ancient Rome *Exploring History* simulations requires students to move beyond traditional discussion and engages students with its unique format. Students research a historical topic and then must debate either for or against an issue. They are further engaged, because several students assume the role of "fence sitters" who are undecided. The students for and against the topic must sway the fence sitters to their side. This challenge motivates students to become more involved in their learning, while also demonstrating the fact that history involves multiple perspectives.

Because the strategies for active learning described in these programs are innovative, calling for change in classroom techniques, many of the strategies work better than traditional, teacher-centered approaches. It is an accepted axiom that without change there can be no progress. The *Exploring History* and *Primary Sources* series are designed to go well beyond the standard procedures: copying notes from the board, passively listening to a teacher's lecture, or answering

multiple choice questions from a text. These lessons are designed to make students full participants and active learners, good decision makers, and competent problem solvers. The strategies promote a high level of student participation. Every lesson challenges students to develop speaking skills and the intellectual dexterity to debate, make speeches, lobby wisely and shrewdly, and take part in hearings, discussions, and simulations.

Active learning utilizes an experience or participatory approach where content, process, and products are balanced. Teachers are more enthusiastic about teaching when they see that students are immersed in understanding the content (Wason-Ellam, 1987). Similarly, the process of the active experience produces a link to a deeper understanding of content that requires ideas to be tested (Emig, 1977). The product, or outcome, should be satisfying so that students understand why outcomes emerge and take place.

Multiple Intelligences

All the lessons in these programs challenge the intellect, reflecting Howard Gardner's work on the Multiple Intelligences (1983), the "abilities or intelligences" inherent in all individuals: logical mathematical, visual spatial, verbal linguistic, rhythmic musical, bodily kinesthetic, interpersonal, and intrapersonal. Students are required to apply math skills when compiling statistics and doing surveys. They utilize spatial skills in building three-dimensional models. Linguistic skills are utilized when giving speeches and taking part in discussions and debates. The musical element is in evidence when the students are called upon to create songs, perform a dance, or play a musical instrument. The interpersonal and intrapersonal skills are tapped daily in class, as students reflect on how the work affects them personally and are engaged in the everyday activity of cooperative learning and evaluations of all they do as individuals and groups.

Multi-Modal Learning

These programs are also intended to assist teachers in developing in students a unique understanding of essential material taught through an integrated approach. The method of instruction is multi-modal—connecting the visual, spoken, auditory, literary, and linguistic modes of instruction. This compilation of activities responds to the need to respect the diverse ways in which students integrate information; it also recognizes the importance of addressing the multiplicity of personal learning styles that exist among individuals. In this way, the strategies used can help students move information from short-term to long-term memory.

The active learning experience incorporated in these two programs utilizes as many senses and modes as possible. It recognizes that students come to the class with varying strengths and talents. It also recognizes that students have areas of weakness. The active learning approach recognizes and taps the strengths, while overcoming the weaknesses. If we require only one way of handling information, then we compliment those students who have handled it well within that mode, and discriminate against others who could have handled the information well through other modes (Stix, 1992).

By introducing students to new information through a multi-modal approach, more students will be able to develop a greater understanding of the material (Baker, 1989). Students will discover and

define for themselves how the new knowledge connects to previously learned content (Stix, 1992). This will permit students to discover the meaning embedded in the lesson, and they will better understand the logical relationships between the disciplines. A multi-modal approach improves student comprehension because teachers can make ideas more intellectually accessible to them (Bishop, 1978).

Phillips (1987) proposes a form of multi-modal communication that uses verbalization between pictures, concrete examples, and symbols. This communication model allows students to move from one stage to another more easily. BeMiller (1987) states that as students interact with different modes of expression, they "consequently visualize more interrelationships and [they have] better expositions of those ideas" (p. 365). If students **read** the material; **talk** about the content in cooperative groups; **act** it out in simulation, debate, or discussion; **evaluate** their performances; and **write** reflections on their experiences, then students will have a greater chance of moving the information from short- to long-term memory. *Exploring History* and *Primary Sources* provide these opportunities.

Integrated Learning

A major focus of the entire *Exploring History and Primary Sources* series is integrated learning, and, to a lesser degree, interdisciplinary instruction. There is a differentiation of the two terms, because not all of the disciplines are linked for each lesson. Linkage takes place when it is natural and appropriate for the subject areas to come together realistically. With integrated learning, the outside discipline becomes embedded in the social studies classroom. In the *Exploring History* series, this occurs in the Oregon Trail exercise, when students study biomes and disease as they would in a science curriculum. When the classes create their sites for a colonial settlement, they study topography and contour maps as in social science, and mathematics lessons on measurement and scale are revisited. The events that led to the American war for independence and the tax burden imposed on the colonists are explored in social studies. And, at the same time, the students examine how their families and they themselves are subjected to taxation in their own communities. Content is always scrutinized in depth, and the natural connections hook together whenever it is logically possible.

Students who make connections between two disciplines can feel a sense of accomplishment. When one discipline naturally supports another and can become embedded in the lesson, natural connections are made that become authentic to the task. Teaching to a wider variety of disciplines may tap student's own interests, and they may become internally motivated to learn more (Emerick, 1992). However, it is up to the teacher to nurture these inherent connections through various grouping structures. The process of selecting appropriate grouping structures for an integrated approach to active learning plays a key part in allowing students to draw natural parallels between subjects in their own personalized way. For example, while studying ancient Rome, the Greeks supplied most of the material found in Roman mythology. However, one myth stands alone: The Founding of Rome or the story of Romulus and Remus. This language arts connection makes sense to explore because it is authentic to studying ancient Rome. Therefore, integrated learning is encouraged when and only when the connections are truly obvious and natural.

Memory Retention

It is not too difficult to project a high success rate from the *Exploring History* and *Primary Sources* programs, since memory retention of children is rated at 75% when they practice by doing and 90% where they teach and learn from one another. This was stated in the Learning Pyramid back in 1969 (National Training Center), and that assessment has not been disproved. Therefore, student cooperation and knowledge sharing is the focus of all of the lessons, whether through a simulation, debate, playlet, discussion, or creating a site for a colonial settlement. Whatever the format, the students do the work, and they join together to do it cooperatively, teaching and helping one another to attain their goals.

The Role of the Teacher

Historically, the teacher has served as the omnipotent and unchallenged source of knowledge. As lecturer, the teacher delivered information to the students. The students' role was to listen, to take notes, to study, and to be able to demonstrate an ability to return the information received. In the active learning approach, the teacher's role is reconstructed. The Active Learning Approach has been proven to strengthen student achievement (Kourilsky, 1992 & Baker, 1989). The teacher needs to be confident enough to relinquish power to the student. Although the teacher maintains full control, the classroom becomes so highly structured that the teacher's position is elevated to the role of manager. Goals, objectives, and student outcomes continue to be firmly set by the teacher. However, the teacher now facilitates the class and helps students obtain those objectives through a process of discovery rather than through passive involvement.

The teacher can model different roles. As a facilitator of an activity, he or she sets the stage for an activity to take place. Within this model, the teacher can be the timekeeper for a debate, the manager who keeps cooperative learning groups focused, the director who makes sure that the different groups of students reconnect after working on their various tasks, and the producer who helps the different groups network. In addition, the teacher can model as a supportive and sensitive counselor to the groups, or as mentor to individual students engaged in independent projects.

In order for these natural relationships to satisfy the teacher's anticipated outcome, lessons must be prepared with great insight. Although the teacher may predetermine some of the relationships in the classroom setting, he or she is flexible in the approach as a facilitator in the learning process. The act of discovery is left to the students. During this process, students may be allowed to formulate their own judgments about the content. Teachers may want to include critical listening, reading, handling, and viewing in their lessons as instructional modes (Stix, 1992).

The environment in the classroom is crucial to the types of behaviors invoked during activities. The holistic-integrated approach encourages intrinsic motivation through participatory activities. Activities that have students perform will encourage students to take risks and help motivate students to learn so that the content is meaningful (Emerick, 1992). Risk taking can exist and flourish only when a teacher does not presume ownership of predetermined answers and is open to the flow of new ideas from the students.

If teachers establish a humanistic environment where the powers of thought and ideas are respected, students will be more apt to explore alternative solutions to problems that might otherwise be viewed by the whole class as meaningless and irrelevant (Good & Brothy, 1987). These alternatives may then be examined and challenged in a non-threatening way.

Using Primary Sources

Students are taught to rely on relevant documents, diaries, personal journals, photographs, newspaper articles, autobiographies, contracts, and treaties, as well as period songs, art, and literature. When some materials are beyond their conceptual abilities, or simply too brief, these lessons encourage the use of scenarios and stories that give depth and breadth to the work being taught that is appropriate for the age level. This allows students to fully understand information that may otherwise elude them. One example could be 100-year-old legal briefs that have been rewritten in a narrative format to allow and encourage students to critique the scenarios.

Primary Source Documents illustrate differing viewpoints and encourage students to interpret the social, political, and economic institutions of the time period. Primary sources include documents, maps, photographs, political cartoons, audio, and video files. Letters and diaries provide first person accounts of events of each time period. Newspapers include interpretations of events and reports of events from relevant time periods as well. The use of hands-on materials such as primary sources improves student learning (Jacobs, 1989).

Writing Across the Curriculum

The *Exploring History* and *Primary Sources* lessons require students to reflect and write about what they have learned. Information researched for lessons dealing with ancient civilizations, exploration, spices, immigration, the labor movement, and the Roaring Twenties all impose a variety of writing requirements that continually challenge the abilities of the students. They are assigned to write speeches, keep journals, compose diaries, draft exposés, and generate polemics, all reflecting what they contributed to their project and what they learned in the process. Many of the exercises call for rough drafts and the application of editing skills before the final piece is completed.

Shared Reading

In the same fashion that the series is committed to writing across the curriculum, so too is there a commitment to shared reading. It is through meaningful discussion and activity experiences that instructional strategies for differing units may be introduced, demonstrated, discussed, and practiced with the entire class. This technique is welcomed as one of the teacher's and students' most efficient tools, allowing for the introduction of primary source materials—be they historical documents, newspaper articles, editorials, diaries, or journals—from a particular time period. By reading a given text, sharing its meaning, and discussing how it could be interpreted, students become engaged with the content. Taking meaningful content and having one peer share or teach another his or her viewpoint allows for greater memory retention.

Higher-Level Thinking Activities

As shown above, the latest innovative approaches and ideas that seek to improve educational

methodology are included in *Exploring History* and *Primary Sources*. Benjamin Bloom's concept of "taxonomy" sets down the Levels of Thinking and encourages students to work at the higher levels of application, analysis, synthesis, and evaluation. These lessons continually call on the students to work together in brainstorming activities, encouraging careful and creative thought. These activities, teaching each other, and learning from one another, carry them to higher levels of thinking. The students learn to evaluate, analyze, and synthesize information as they perform Socratic Debates, participate in Stix Discussions, and write dialogue for plays, whether the issue is taxation, slavery, making a treaty, or deciding whether there will be war or peace.

Open-Ended Activities

When students are encouraged to explore alternatives, they may realize that a problem can be solved or explained in more than one way (Kennedy, 1985). If a teacher tells a student which route to take to get from point "A" to point "B" on a map, it requires very little thinking on the student's behalf. On the other hand, if the student is asked, "How many ways can you think of to get from point A' to point 'B'?", the student must think before arriving at a conclusion. Moreover, if the student is then asked to determine the best route during rush hour, at the height of a snow storm, or if a visiting dignitary comes to town, the highest level of thinking—evaluation—will occur.

Although each student's thinking may take a different route, what is most important is that everyone is given the opportunity to solve the problem in his or her own way first. Students may want to examine and challenge each other's routes in order to reach a consensus on the best route. For example, while one route may seem faster, an alternate route may indeed be shorter or more scenic. Students learn that consulting a map for the most productive route requires considering if an area is mountainous, if it is made up of side roads or highways, if it is congested with traffic lights, or if toll booths present a potential hindrance to reaching their destination in record time.

Allow your students to redefine their solutions on an ongoing basis. If students learn that their position paper, their solution to a problem, or their result to a scientific experiment is acceptable today but is not the final definitive solution, then they will be open to their own future growth (Kennedy, 1985). Nothing is more exciting than students seeing their own progress without the instructor having to point it out to them. When this happens, it is a genuine act of discovery!

Open-Ended Questions

The teacher's ability to ask good questions is one of the most important ingredients in good instruction. Two types of questions will be discussed. One type, the closed question, requires one answer, and only one answer. While the closed question has its merits, the open-ended question encourages students to utilize the same, if not more, information.

For example, the lessons begin with a question starter such as, "Generate a list . . . ." Think about the information upon which you would want your students to draw and compare to previously discussed information. China offered different goods because their climate differed from Europe's climate. Now, carefully phrase the question, asking the students to use higher levels of thinking. "Generate a list of all the reasons why explorers wanted to seek a faster route to China.

If students were working in cooperative learning groups of three to five students, a great deal of conversation would be generated. The hope is that a discussion would take place focusing on much more than just goods. It may include the hunt for high-priced spices, luxuries like tea and silk, meeting the challenge, wanting to be the first, or gaining fame and glory. While open-ended questions are based on specific content that needs to be addressed, the questions encourage students to redefine or challenge their own ideas.

Strategies for Grouping Students

When the teacher utilizes the role of facilitator and asks open-ended questions, he or she can choose various grouping structures. As much as cooperative learning has its values, it is just one form of grouping available. The ability to choose from many groupings empowers the teacher to select a classroom structure that best meets the needs of students and the goals of the class.

Whole-Class Forensic Strategies

Whole-group activities keep students involved with the same information. The best structures that come to mind are different forms of forensic speaking, the art of formal debate, or argument. We can use the timely issue of nuclear waste as an example.

For homework during the week, students are assigned to read three articles that cover the controversy over federal assistance in cleaning up a plutonium waste site in the state of Washington (information gathering). The homework questions could be, "For what reasons should the government help clean up the contaminated site and continue using it for storage of the nuclear material?" or "Generate a list of reasons why the government should or shouldn't clean up the site and return the land to the farmers of that region." Students are asked to write a position paper that cites at least five reasons why the land should or shouldn't be returned to the farmers.

The next time the class meets, the teacher can structure the lesson in a number of ways. One possible technique is called "inner-outer circle." The teacher arranges the chairs in two circles, one inside the other. When the students arrive, with their papers in hand, students are asked to sit in the inner circle if they want to support the government. Students who want to support the local farmers are asked to sit in the outer circle. The inner circle students are told that they may discuss the issue. Each student is allowed to talk for no more than one minute to either make a statement or to react to something that another student has said. Outer circle students are asked to take notes on points they will want to address. They may be asked to use an "accountable talk" assessment sheet, focusing their attention on how well the students are speaking or reacting to one another.

After five minutes of discussion, the groups are asked to switch places. It is recommended that the teacher allow each group to move to the inner circle at least twice. This forces students who like to dominate a discussion to listen to an alternative point of view. At the end of the class, for approximately 10 minutes, the teacher should ask the entire class to reflect on what they heard and to create a pro and con list on the board. Then, the teacher can request either for homework or for classwork that each student write a reaction to the entire process and to take a position. This monitors individual progress and individual work. With journal writing assessment, the comparison of the pre and post-position papers becomes a powerful tool to assess the growth of a student's thinking (Graves, 1983).

Another technique in the area of forensic speech, magnetic debate, requires students to vote on whether they are for, against, or undecided on a stated issue. They write a position paper that allows three views to emerge, and the teacher tallies the responses at the beginning of class. Students in favor of the position sit on one side of the room and face the center. Students against it sit at the other side of the room and face the center. All undecided students sit in the middle. Each side is given two minutes to speak, alternating for two-thirds of the class time. Following each of the forensic speeches, an undecided student may move his or her chair a few feet over to the side he or she finds more persuasive. The side that receives a new member to its group receives a point. At the end of the forensic speaking, the group with the most new members or points wins.

Either the last third of class time, or the next class, is spent discussing what happened during class. There are many techniques that a teacher can use for whole-class work. As the students describe the issues they learned, the teacher may create a Venn diagram of what took place. Subsequently, the teacher may ask the students to write a comparison-contrast report, rather than a position report as previously suggested. In this case, group work supports individual work. Allow yourself to be open to the available possibilities. Underachieving students have been shown to reverse their pattern and perform well when the teacher incorporated a wide range of resources and strategies (Emerick, 1992).

Cooperative Learning

Another type of grouping is called cooperative learning. Here the teacher groups students together in order to create heterogeneous teams. Within each group, students are given the instructions needed to complete a task. Regardless of the roles that each play, the teacher should make sure that all individuals pull their weight for the entire group (Slavin, 1983).

There are many structures used for cooperative learning groups. Some techniques are often used for research. Although no leader is designated, every student has a particular job. Students are assigned different cognitive jobs, such as recorder, speaker, voter, organizer, or clarifier. All the members of the group must contribute to the assignment. Every member is reminded that it is necessary to try to see other points of view within the group. A member of the group may ask the teacher a question only after the group has tried to solve the problem or answer the question themselves. At the end, the speaker of the group is selected to present the group's findings to the rest of the class.

Another structure for cooperative learning involves having each student obtain a different area of information for the group's theme, then all students will participate and share their work for the group as a whole. By either assigning roles or allowing the students to choose subtopics to research, the teacher helps students to focus on the information they need to contribute to the group report.

For example, during a study of the Oregon Trail in *Exploring History: Westward Expansion,* a group is asked to decide the advantages or disadvantages of moving through Wyoming in order to reach the Willamette Valley in the Oregon territory. The responsibility of one student may be to determine the climate and natural food found during each season of the year in a particular region. A second student may be assigned to examine rivers and streams, land formations, and the ability to move through the territory with ease. A third student may have to determine the relationship the

local Native Americans had with the immigrants moving across their land and the United States government. The final student might compile a list of items needed for families to successfully reach their destination. At the end of the investigations, the team has to merge the information into one report for the class. This is an example of cooperative learning at its best.

Paired Learning

Paired learning is an excellent tool when manipulative materials are used or when a teacher asks students to reflect on a personal experience. When using manipulatives, it is advisable for teachers to have two students, who are sitting side-by-side, share materials so that each can have the opportunity to move the materials around. The more students become active participants, the more likely they will have the opportunity to personally integrate the material (Stix, 1992). Similarly, as students are exposed to many modes, they will integrate the information with ease and in harmony with their own learning preferences (Baum, 1990).

Paired learning is also used when students are asked to reflect on personal experiences. At times, personal experiences may help students intimately identify with the content of a lesson. For example, if students are studying international conflicts as an integrated unit, the teacher may want to pair students and have them discuss their personal relationships with family and friends. The issue of conflict is a rough, personal topic. Some students, who would never open up and talk to a group, may feel more comfortable sharing ideas with only one other individual (Hayes Jacobs, 1993). Although the originally paired speaker and listener may only hear these personal anecdotes, the students may be able to better understand why conflicts exist when they can identify and share conflicts that are close to home.

As students find out that many private or embarrassing issues they once thought were theirs alone are really common issues, they find relief (Gordon, 1974). This allows students to become more open in their verbal and written expression (Mets, 1989). When students are allowed to "share" personal experiences in this way, they may realize that while everlasting peace is something to strive for, it is difficult to attain.

Independent Work

Working cooperatively with others as an instructional strategy is commendable, but should not be viewed as the utopian response to current educational practices. Through individual work, students need the opportunity to explore on their own and to examine, question, and hypothesize about the learning outcomes (Tannenbaum, 1983). For as much as the students need to challenge each other's ideas in a warm, productive way, they also need to learn to be critical of their own conceptions.

For example, assume a teacher asks his or her students to list 15 items necessary to survive for two weeks in the Negev Desert. Then they are asked to select and prioritize the five most important items. The students would have to first consider what they feel they need in order to survive, and then they would have to be critical of their own selections. Writing can be used to promote metacognitive awareness because it's an activity that requires students to reflect upon their own knowledge (Stix,

1992). As a final step in this exercise, students may have to defend their choices against any challenges posed by their peers.

Although working cooperatively warrants support, learning what is possible on one's own is equally valuable. When students are engaged in independent work, the primary goal of the teacher is the monitoring process. When teachers assign a long-range task, it is imperative to discuss and negotiate a contract with the students. Periodically, the teacher should ask students to bring to class necessary materials for "inspection." How closely a teacher monitors students' work during independent study is usually a good indication of the overall quality of the finished piece. The more attention paid to the tasks by the teacher, the better work produced by the students. Hence, having a checklist is often valuable. Not only should the teacher critique this stage of development, but also students can critique one another before the final project is due.

One of the most important skills a student can learn is how to constructively critique. At first, the group discusses the project that has just been assigned. Students are then sent off to either create or to solve a problem. Then the group reconvenes to critique each other's work. Part of their grade is determined by their ability to critique and analyze one another's work in a positive spirit. The emphasis is always on growth, rather than on creating a "perfect" product.

Personalizing Instruction

Students often wonder about the purpose for learning some of the required information taught in classrooms. Students say, "How will this information help me today?" More commonly, students ask, "What does this have to do with my life?" Their concern is both just and valid. If teachers prove to students that there is a connection, then the information will become more valid and purposeful in the students' lives.

History is the easiest example of connecting learning to students' lives. History has a tendency to repeat itself, and when students learn this, they make connections to their own lives and the times in which they live. We witness the rise and fall of nations, persecution, and struggles for land and power with alarming rapidity. It is important to allow students the opportunity to bridge the gap of events that occurred hundreds of years ago with what is going on in their world today.

Another example of making information valid to students can be found in the sports world. Most students have played volleyball at one time or another, and most every student has also endured an uninteresting history class. How many of those students were taught to bridge the connection between history and sports? Volleyball was created to entertain the troops overseas during World War II. When the troops were bored and had few opportunities to release their tension, volleyball was created as a form of convenient activity. Students can identify with the need for diversion, and they are more likely to remember this fact when they can make the connections to their own lives. Today, volleyball is played as a competitive sport in the Olympics, at beach tournaments, at universities, and in many middle and high schools throughout the country.

Just imagine how powerful a journal writing assignment would be if students were asked to make a comparison between what they learn and what they notice in their own neighborhoods. Tierney (1986) strongly recommends that students become "owners" rather than "renters" of information. In his study, fifth grade students who personalized information through writing had a higher

retention rate than the control group.

King (1992) also conducted a study that compared student retention on a given lecture when they used either note taking, summarizing, or self-question techniques. Self-questioning techniques are questions that induce the learner to use higher-level cognitive processes (analysis, synthesis, or evaluation). On a retention test of the lecture content one week later, students who used self-questioning techniques outperformed those who summarized or reviewed notes. It is imperative to give students a chance to reflect on what has been studied, to take a position, or to question something that was learned.

Creativity
Working in school or at home, children are encouraged to be creative. Throughout the ***Exploring History*** series, students design their own site plans, creates scripts and dialogue for plays, organize their writing into scrapbooks and journals, and fashion a double-view pictorial collage, among other creative activities. But, most importantly, creative learning strategies build a classroom community and a group dynamic as students learn from each other while brainstorming and charting information. Rather than being passive listeners, students are transformed into active participants who design and create mystery boxes, slide show presentations, and poignant dioramas that incorporate primary source photographs. They learn to think systematically, to accept diverse viewpoints, and to tolerate and understand others as they must place themselves in roles of people from year's past. As petty antagonisms and resentments dissipate, their work takes on the demeanor of showing tolerance and of being relevant and purposeful.

Generative Teaching
Generative teaching demands that students become active participants in their own learning to ensure that information is more than a collection of passive facts to be memorized. The use of generative teaching to personalize information is supported throughout educational literature and includes everything from art to economic instruction. Kourilsky and Wittrock (1992) found that generative learning procedures in cooperative learning classes significantly increased the learning of economics when compared to a control procedure that used only cooperative learning methods.

In generative teaching, students relate subject matter presented in class to their prior knowledge. They have to relate the subject matter to their own beliefs, preconceptions, and world experiences. Students have to use a multi-modal approach to generate examples (visual and verbal), and they have to take one another's learning styles into account. Moreover, they are expected to use high-level, open-ended questions, and they had to be actively involved. But, most importantly, they have to take responsibility for their own learning. The focus of generative teaching is that students make connections between what they learn and themselves. It is significant to note that the results of the study indicate how learning increased significantly and misinformation decreased proportionately when generative teaching was used.

How This Will Affect Students' Lives
The end of a school day does not necessarily signify that the learning process, begun in a lesson, has

come to an end. Much of what is learned throughout the *Exploring History* series is both informative and useful and has an impact on the daily lives of the students who use it. Historical episodes can suddenly be significant and relevant to the present and easily transferred to a personal level.

The strategies in this guide help students to bridge the gap between history and their personal lives. In the *Exploring History* series, the Shirtwaist Factory fire lesson prompts students to question the safety of their own world—their school, their home, or their mom's and dad's workplaces. It helps them comprehend that the corporate world can be both callous and brutal, motivated solely by the desire to make money and show a profit. Their study of child labor laws instills in the students an understanding of why they should value their childhood years and be thankful for compulsory education. Oliver Twist may have had his ups-and-downs, but for many children in 19th century America, childhood was treacherous and not at all fun. When many of the students become old enough to get work permits, they will remember the laws and will clearly understand what a better world was made for them.

Community Connections

As students grasp the significance of lesson content and how it affects them personally, it becomes equally important that they see how it influences their community and the society in which they live. Therefore, the lessons in *Primary Sources* and most of the *Exploring History* units send students out to their neighborhoods to pound the pavement and probe at the local level. They learn who their government officials are, from the city council up to the state assembly and congress, and where their offices are located. Students investigate current tax laws. Students are assigned people to contact in their communities, conduct interviews, and assess the impact of local government and its efficacy. It becomes imperative for the children to realize that they are not only studying history, they are living it.

Preparation for the Workplace

What students learn today in the classroom is preparation for the workplace that awaits them tomorrow. Businesses and corporations are seeking individuals who can work cooperatively with people of all different backgrounds. These strategies and every lesson in the *Exploring History* series have students working together and going through group decision-making processes. Students are encouraged to use computers and seek information on CDs as well as the Internet. The classes are a total mix, a grouping blind to race, sex, ethnicity, and religion. A basic requirement in most of the lessons in this book is brainstorming, a tossing out of concepts and ideas, speaking one's mind as well as listening to what others have to say, and finally getting down to the nitty-gritty of getting the job done. Students voice their opinions, share their ideas, and go through the give-and-take of negotiating, compromising, and working out the final decision.

Learning Tolerance

Many of the activities embedded in the *Exploring History* series have opposing points of view: Hannibal against the Romans, rebels against loyalists, Federalists versus Democratic-Republicans, slaveholders versus abolitionists, the North against the South, labor opposed to "big business," or the "Hawks" versus the "Doves." These differing points of view are expressed in the course of the lessons in speeches, debates, discussions, and written polemics. The foundation for including these

differing viewpoints comes from the National Council for the Social Studies recommendations for effective standards and program content. At the very least, the students come away with the understanding that there are at least two sides to every story. But, more importantly, they also learn to be tolerant. If they speak well for their side on a particular issue, they must also listen well and have respect for the opposition. These confrontations over important issues promote courtesy and civility, which is extended to all. America's greatness has always been its tolerance and acceptance of those who came to these shores simply because they were different, and chose to remain that way. The lessons in *Exploring History* and *Primary Sources* can instill in young minds these small grains of tolerance, respect, civility, courtesy, understanding, and acceptance.

Assessment and Evaluation

How students are evaluated has been brought into sharp focus in the last decade. Assessment and evaluation must be just, equitable, impartial and free of bias, dispassionate, and objective. This book is determined to meet those requirements in all of the lessons. But, in the final analysis, it will come down to what takes place in the classroom. The strategies require that students have a clear understanding of how they will be evaluated. Expectations are clearly delineated, the parameters of assessment sharply drawn, and students are given an active role in determining their own criteria for evaluation. Student-centered assessment (Stix, 1996) has every individual participating in the formulation of specific criteria, and forms an essential rung on the ladder of growth, maturity, and responsibility. Not only do students evaluate the lesson, they will also evaluate themselves, their peers, and their group's performance.

Negotiable Contracting of Authentic Assessment

What would happen if students were invited to help decide how their work should be evaluated? Would they exploit the opportunity, designing standards so ridiculously low as to guarantee effortless good grades?

Surprisingly, the answer is no. Experiences show that students who are given a role in the assessment process can and do rise to the occasion. Given appropriate direction by their teachers, students are able to accurately evaluate their strengths and weaknesses and pinpoint where to focus their efforts to get the most out of what they're learning. As a result, students view assessment not as an arbitrary form of reward or humiliation (a common perception of middle school students), but as a positive tool for personal growth.

Negotiable contracting is a new approach to involving students in the assessment process that is currently being implemented in many classrooms (Stix, 1996). Negotiable contracting is adaptable to both arts and science curricula and is flexible enough to accommodate multi-modal forms of learning. Like any assessment, it ensures that the teacher remains squarely in charge of the classroom and ultimately responsible for assuring that grading is equitable and appropriate.

How can we give students shared ownership in their own learning? Although the teacher is ultimately responsible for grading, his or her role is not as an all-powerful judge of students' work but as a facilitator of discussion on the assessment process. As discussed, the more students are personally engaged in the learning process, the more memory retention soars because there is vested

interest.

Once a new or prescribed strategy has been explained to the class, the teacher begins the negotiable contracting of criteria for assessment. The teacher asks students to place themselves in the position of the teacher. Now that they have a good idea of the task, what criteria should be used for grading the simulation? Allow students to brainstorm criteria in their cooperative groups. Across the "negotiating table," teacher and students arrive at a consensus that is mutually acceptable. The teacher lists the results on large chart paper as a reference guide, which can be posted in a visible area of the classroom.

The result is that students feel like valued participants in the assessment process, and they are motivated to strive toward those self-imposed, criteria-based standards. The contract process can be used independently of a formal evaluation and can serve a variety of purposes. Some lessons do not call for formal assessment. However, the teacher may still want to set short-term goals by establishing criteria for high-quality work. Negotiable contracting is ideal for such a lesson. For example, if students are to work together in groups, negotiable contracting is helpful in setting up expectations such as cooperative roles, research materials, and formats for charts and graphs.

Types of Assessment

Researchers are using the term "authentic assessment" in different ways. Above, the terms "authentic to the task" or "authentic assessment" were used when the assessment was a natural outgrowth of the strategy of instruction. The criteria are not made up ahead of time for all types of strategies. Instead, it is so natural that students can participate in determining what qualifies to be criteria.

In the integrated learning philosophy approach, "authentic" describes a circumstance in which information is totally integrated into the student's scheme of understanding. For example, when students are asked to perform a task, they are aware that a specific performance is expected of them. Therefore, this task is classified as performance assessment. In contrast, assume that six months later, the students are in the nearby shopping mall and are presented with a problem. If they internalized and integrated the information from their class studies without prompting, and can apply it or perform it naturally, then it becomes "authentic" (Meyer, 1992). As long as teachers request a performance, it is difficult to consider the action "authentic" because it was prompted. It becomes authentic when the requested task is naturally and unconsciously integrated with whatever was learned previously and becomes a means to an end. The difference is quite simple. When a student naturally can take a skill to a higher, more abstract level, the authenticity is not in question. However, if a student is asked to use the skill in a classroom performance, the result may be staged and, therefore, may not be authentic.

There are many types of assessment. No matter what type is adopted or created, there are a few factors that should be considered. The assessment should be formative (Madaus and Kellaghan, 1993), so student achievements are recognized in a way that enables the teacher to plan the next lesson. Assessment should also be diagnostic. Therefore, if weaknesses are found, the student can receive extra help. The assessment should be systematic, so performance records can guide overall student growth and serve as a mechanism for comparative analysis among other students. Assessment

should be evaluative, so principals or outside experts can assess the school. Below are descriptions for four types of alternative assessments: journal writing, the writing process, performance assessment, and portfolio assessment.

Journal Writing

There are many ways to assess journal writing. Many teachers enjoy giving journal-writing assignments because they can immediately see who does or does not understand the concepts taught (Evans, 1984). Burton (1985) maintains that when a student writes, the misconception comes into clearer focus. Writing empowers the student to become extremely specific about the precise problem.

This ongoing assessment of student's work is an important feature that teachers can easily incorporate into their usual procedures. Journal writing can be a powerful assessment tool, especially if students and teachers outline the important elements that would constitute an excellent report. As a group, they can decide what will be evaluated ahead of time and create an effortless assessment tool.

The Writing Process

Other teachers prefer to give one grade for the writing process and include all the stages: brainstorming, rough draft, revising and editing, and final draft. This assessment form can be considered a mini-portfolio, rather than a journal writing assessment form. In this form, the teacher is looking for growth between the brainstorming stage and the final stage. The teacher may look for the following: Did the student focus on one or two logical areas after the brainstorming process? Did the writing become more concise, clear, and succinct through the drafting process? In what ways did the student begin to add references or examples to prove the initial points?

Performance Assessment

In performance assessment, teachers can observe how a student works with other students in the class. A performance or behavior assessment form can be divided into four abilities: to explore the topic, to communicate the content, to work collaboratively, and to be creative. The first section, the ability to explore the topic, focuses on the degree to which the student participates with interest or contributes useful ideas. The second section, the ability to communicate content, observes how the student expresses ideas clearly and effectively, employs medium to express ideas, and coordinates verbal and manipulative expression. It also monitors and reflects on the student's thinking and performance. The third section, the ability to work collaboratively, can determine if the student is attentive to comments, offers helpful criticism and encouraging remarks, asks questions or requests input, or displays responsibility. The last section, the ability to be creative, requires students to display flexibility in exploring ideas or exhibit creative inventiveness. In all four sections, the behavioral patterns are closely monitored and enter into the overall evaluation, which include attentiveness, courtesy, and respect.

Depending on the activities, performance assessment can deal with how students manage the topic and how they communicate with each other when they work cooperatively. Assume for a moment

that you do not evaluate both individual and cooperative behaviors. An irate parent enters the class at the end of the day to discuss the comments on her daughter's report card, which indicate your dissatisfaction with her daily performance. Since you do not occasionally assess behaviors and document your findings, you lack support for your report comments. Therefore, it is vital to assess and document student behavior. Teachers can get a better sense of their students' development if they periodically allow time for observation during class activities (Wolf, LeMahieu, & Eresh, 1992). The assessment methods should utilize a wide variety of presentation modes as well, making it more multi-modal (Madaus and Kellaghan, 1993). Presentations, oral discourse, art renderings, map creating, and computer simulations can all become part of the way of assessing children.

Portfolio assessment is as valuable to the student as it is to the teacher. Portfolios represent a file of the student's mental growth and development based on progressive improvement (Esty and Teppo, 1993). By selectively choosing work on a biweekly, monthly, or bimonthly basis, the portfolio shows progressive accomplishments through a given period of time (Feuer and Fulton, 1993). Portfolios also help students organize their work so that both they and their teachers can easily identify weaknesses or areas of improvement throughout a specific unit of study. Teachers can remedy problems and point out improvement simply by referring to the portfolio. Instructors must be aware that the assessment accurately focuses on the student abilities that are relevant (Worthen, 1993).

Portfolios may also be used as an academic tracking tool from one grade to the next. At the beginning of the year, teachers spend a great deal of their time and effort attempting to discover what their students find difficult and challenging. If student portfolios were passed on to the next teacher, challenging areas would be more easily recognized. Weeks of initial pre-testing could be replaced or eliminated.

Portfolios also act as a convenient way to show parents both their child's improvement and where growth is still needed. As a result of ongoing performance assessment, teachers, students, parents, and administrators can be more attuned to what takes place within the classroom.

Creating a Rubric

The rubric is an important element of using negotiable contracting for formal assessment. A rubric is a carefully designed ratings chart that is drawn up jointly by the teacher and students. Along one side of the rubric are listed the criteria that the teacher and students decide are the most important ideas to be mastered in the lesson. These are mutually agreed upon and are based on the brainstorming session called negotiable contracting. Across the top of the rubric are listed the rankings that will be used to assess how well students understand each of the criteria. The rubric also indicates how much importance should be given to each criterion, based on its importance to the overall lesson. Within each ranking, there also may be numerical gradations, depending on whether a student performs on the higher or lower level of that category.

Unlike a traditionally assigned, generalized number or letter grade, the rubric serves as an in-depth "report card" for a project or research paper. As a result of their negotiations, before they've even picked up a pencil or pen, the students are perfectly clear about what is expected in their long-term projects. Moreover, they have the satisfaction of sharing a voice in setting the objectives for the project and establishing a ratings system that they considered fair and equitable.

Conclusion

Teachers can view *Exploring History* and *Primary Sources* as an integrated approach to active learning and as an opportunity to satisfy differences in learning styles. When students are offered the freedom to actively participate through independent, cooperative, and student-centered learning, they are more likely to retain a greater percentage of the learned material. Studies have shown that when students receive information in a lecture, only about five percent of the material is retained. However, when students actively participate, they retain at least 70 percent (National Training Laboratories, 1968).

It is a teacher's responsibility to draw upon many sensory and modal opportunities in order to respect learning differences. If teachers are to address the many cultural differences in schools today, then they must become more eclectic in their teaching practices. In studying the Romans and their engineering skills, their use of concrete, and the construction of the arch, students should not only read and hear about the process. The procedure acquires a degree of reality if students can actually touch, visualize, and actively explore measurable tangibles. The unit on Rome and the study of engineering and architecture takes on an added dimension for the class if they can actually build a model—such as a bridge that is made entirely of paper that utilizes the principle of the arch for its span—an activity that requires a comprehensive understanding of the skills they are learning and applying to their task.

This approach to teaching will encourage teachers to act as facilitators rather than as lecturers. This will support not only the best interests of the students, but the best there is about excellence in teaching. The freedom to explore knowledge through an integrated approach to active learning allows teachers to harmonize with their students rather than have them strain to follow one tune.

The following references were employed in the creation of this research-based program:

Baker, D. W. (1989). *Neuropsychology and Appropriate Modes of Instruction.* Columbia University, NY. AAD 90-02503, 50, section 08A.

Baum, S. (1990). *Gifted but Learning Disabled: A Puzzling Paradox.* Reston, VA: The Council for Exceptional Children. ERIC, ED 479–490.

BeMiller, S. (1987). "The Mathematics Workbook." In Toby Fulwiler (ed.), *The Journal Book* (359–366). Portsmouth, NH: Boynton/Cook Publishers.

Bishop, J. E. (1978). "Developing Students' Spatial Ability." *The Science Teacher,* 45, 20–23.

Burton, G. M. (1985). "Writing as a Way of Knowing a Mathematics Education Class." *Arithmetic Teacher,* 33, 40–45.

Emerick, Linda J. (1992). "Academic Underachievement Among the Gifted: Students' Perceptions of Factors that Reverse the Pattern." *Gifted Child Quarterly,* 36:3, 140–146.

Emig, Janet. (1977). "Writing as a Mode of Learning." *College Composition and Communication.* 28 (2), 122–128.

Esty, Warren W. & Ann R. Teppo. (1992). "Grade Assessment Based on Progressive Improvement." *The Mathematics Teacher,* 85:8, 616–618.

Evans, C. S. (1984). "Writing to Learn in Math." *Language Arts,* 61, 828–835.

Feuer, M. J. & K. Fulton. (1993). "The Many Faces of Performance Assessment." *Phi Delta Kappan,* 74:6, 478.

Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences.* New York, NY: Basic Books Publishers, Inc.

Glasser, William. (1969). *The Learning Pyramid.* Bethel, ME: National Training Laboratories.

Good, T. L. & J. E. Brophy. (1987). *Looking in Classrooms.* New York, NY: Harper & Row, Publishers, Inc.

Gordon, Thomas. (1977). *Teacher Effective Training.* New York, NY: David McKay Company, Inc.

Graves, D. H. (1983). *Writing: Teachers and Children at Work.* Exeter, NH: Heinemann Educational Books.

Jacobs, Heidi Hayes. (1989). "The Interdisciplinary Model: A Step-By-Step Approach for Developing Integrated Units of Study." In Heidi Hayes Jacobs (ed.) *Interdisciplinary Curriculum: Design and Implementation.* Alexandria, VA: Association for Supervision and Curriculum Development.

Kennedy, B. (1985). "Writing Letters to Learn Math." *Learning:* 59.

King, Alison. (1992). "Comparison of Self-Questioning, Summarizing, and Note-Taking Review as Strategies for Learning from Lectures." *American Educational Research Journal,* 29:2, 303–323.

Kourilsky, M. & M. Wittrock. (1992). "Generative Teaching: An Enhancement Strategy for the Learning of Kravetz, N. (1984)." *Looking at the Special Needs of Gifted Girls.* ERIC, ED 252 039.

Madaus, G. F. & T. Kellaghan. (1993). "The British Experience with 'Authentic' Testing." *Phi Delta Kappan,* 74:6, 458–469.

Mett, C. L. (1989). "Writing in Mathematics: Evidence of Learning Through Writing." *The Clearing House,* 62, 293–296.

Meyer, Carol A. (1992). "What's the Difference Between Authentic and Performance Assessment?" *Educational Leadership,* 49:8, 39–40.

Phillips, E. (1987). "Algebra." In V. Pedwaydon (ed.) *Proceedings of the Honors Teacher's Workshop of Middle Grade Mathematics.* ERIC Document Reproduction Service No. ED 295 792.

Slavin, R. (1983a). *Cooperative Learning.* New York: Longman.

Slavin, R. (1983b). "When Does Cooperative Learning Increase Student Achievement?" *Psychological Bulletin,* 94, 429–445.

Stix, Andi N. (1992). *The Development and Field Testing of a Multi-Modal Method for Teaching Mathematical Concepts to Preservice Teachers by Utilizing Pictorial Journal Writing.* Ph.D. dissertation. Columbia University Teachers College. Ann Arbor, Mich: U.M.I. Dissertation Information Service, Pub. #92-18719.

Stix, Andi N. (1993). *Stix Picks for the Interactive Classroom.* New Rochelle, NY: Creative Arts and Sciences.

Stix, Andi N. (1996a). *Strategies for Student-Centered Assessment.* New Rochelle, NY: The Interactive Classroom.

Stix, Andi N. (1996b). "Empowering Students Through Negotiable Contracting." US Department

of Education: *ERIC* #ED 411 274.

Tannenbaum, A. J. (1983). *Gifted Children: Psychological and Educational Perspectives.* New York, NY: Macmillan Publishing Co., Inc.

Tierney, R. J., P. L. Anders, & J. N. Mitchell. (1986). *Understanding Reader's Understanding: Theory and Practice.* Hillside, NJ: L. Erlbaum Associates.

Wason-Ellam, L. (1987). *Writing as a Tool for Learning:* Math Journals in Grade One. ERIC. ED 285 194.

Wolf, D. P., P. G. LeMahieu, & J. Eresh. (1992). "Good Measure: Assessment as a Tool for Educational Reform." *Educational Leadership,* 49:8, 8–13.

Worthen, B. R. (1993). "Critical Issues that Will Determine the Future of Alternative Assessment." *Phi Delta Kappan,* 74:6, 444–454.