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INCREASING READING COMPREHENSION
THROUGH MEDIATED JOINT ACTIVITY

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education

by
Stephanie Suzanne Lucero

September 1999

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September 1999

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ABSTRACT

This project addresses the need to implement a model for developing reading comprehension which considers the diverse student body within many of today's classrooms. This project uses the theories of Lev Vygotsky as a foundation to support the increase of reading comprehension through joint, mediated activity.

The mastery and appropriation of psychological tools can occur within the context of a collaborative activity. This cognitive education empowers students to gain control over their individual learning process, while increasing their academic output, such as reading comprehension.

The further development of Vygotsky's ideas are incorporated in the Engeström model which serves as an exemplar upon which to design curriculum. The practical application of Vygotsky's theories and the Engeström model are incorporated in the unit plan within the project.

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CHAPTER ONE: INTRODUCTION

Background of the Project

This project addresses the issue of applying Vygotskian principles to reading comprehension development. Developing pedagogical methods on these principles has potential to alter greatly the activities of the classroom environment. Vygotsky's theory of human development is based on socially mediated development; according to Vygotsky, educational activities must involve interaction to facilitate the development of higher mental functions. A student, learning without social mediation, cannot learn to his or her greatest potential. In this viewpoint, scholastic activities must be organized to involve the collaboration of students and the teacher, and be mediated by tools, both technical and psychological. This project seeks to address the issue of which tools are most properly matched to which specific learning activities in order to increase the reading comprehension of students.

I have chosen this project as a response to contemporary attention focused upon two factors: the recently realized educational implications of the theories of Lev S. Vygotsky, and the controversy over reading comprehension methodology in education. Vygotsky's

approach is based on the effects of social, cultural and historical events in the development of the human mind. His contention that higher mental functions are developed through mediated social activity has profound effects on classroom pedagogy, for this goes against the traditional model of education centered on teacher-transmitted knowledge. The public outcry across the United States for improved literacy skills has brought the spotlight and pressure on teachers, who are responsible for students' achievement. Vygotskian principles apply to literacy development and instruction because of the emphasis on language and tool use in development and learning. By applying Vygotsky's principles to classroom activity, teachers can improve not only students' reading skills, but also their learning skills.

It is my belief that the ideas presented by Vygotsky provide a valid theoretical base for developing pedagogical methods. Activity settings which involve collaboration through joint, mediated, goal-oriented activity offer a solid foundation for improving students' reading comprehension skills.

Education in a Crisis

Educators today are caught between the ebb and flow of

reform and tradition. Many were themselves educated in a traditional environment where the teacher was the transmitter of information, and the students were measured by the outcome of this process. Current education reforms intend to change the very nature of the traditional classroom. Many teachers have difficulty understanding the nature of this reform. Understanding reform does not mean attempting to implement the latest fad presented in a brief workshop, but rather understanding the theoretical basis and philosophy supporting reform.

Educators are being pulled from all directions: community, parents, politicians, students and themselves, and these contradictory pressures make it difficult to successfully proceed. This lack of progress leads to frustration. On one hand, society requires an improvement in the end product of the education system; but on the other hand, society neither supports nor understands how to implement change successfully. Unfortunately the old methods of the traditional classroom often prevail, especially the teaching of decontextualized skills in the part of students working as individuals. Although agreement exists on the need for school reform, resistance to change is very strong. What is required is a

restructuring of the practices within the school and classroom environment, a restructuring that is supported by the community. However, state and local decisions, constraints, and disinformation often undermine this restructuring. What is needed is a new model of education which moves away from traditional assumptions: that only experts create knowledge, that teachers are the deliverers of knowledge, and that students are graded on the storage of this knowledge. The new model must be dynamic, interactive, and student-centered; learning should be a process, not a product. Educational methods based on Vygotskian principles address this new model of teaching and learning.

Purpose of the Study

The purpose of this study is to provide a theoretical position to support the change of activity settings within a classroom in order to increase the reading comprehension of learners. By using the psychological theory of Vygotsky as a foundation, I have developed a unit plan in which learners, through joint, mediated activity, learn to appropriate psychological tools to increase their reading comprehension skills.

Researchers who adopt a sociocultural perspective seek

to analyze individual development, which they see as dependent upon social interactions that are a part of the daily activities in any given culture. From this point of view, human activity cannot be studied in isolation. When analyzing human action one must consider a person's past and present experiences and the culture in which that person exists and has existed. To focus on only one aspect of individuals is to reduce and decontextualize their existence, to a level that is isolated from the reality of the world. In education the wholeness of the individual must be realized, and school is a part of the wholeness that is interconnected with the rest of the person's past, present and future.

A sociocultural perspective on human activity takes into consideration the whole person, and leads to educational methods which address the diverse needs of the student body. This creates a context which can lead to success for all students, including those with special needs in language development and remediation in any subject area.

Content of the Study

This introduction has surveyed the potential utility

of Vygotsky's theories as related to education. This project incorporates a review of Vygotsky's theories on human development, the extension of his ideas by post-Vygotskian scholars, and education environments and strategies for improving reading comprehension which are supported by his ideas. These ideas are united in a model (see Chapter Three). Appendix A contains a unit plan focused on increasing the reading comprehension skills of students, using Vygotskian principles as a guideline.

Significance of the Project

This project entails an effort to offer educators alternative methods of teaching reading comprehension skills to their students. These ideas are certainly not groundbreaking, however, many educators remain stuck in their traditional roles without understanding why alternative methods should be, and are, successful. Using Vygotsky's theory as an alternative theoretical basis upon which to develop new pedagogical methods may offer some insight to those teachers who previously did not see the reason behind these strategies and methods. Furthermore, the type of classroom environment and interaction which occurs consonant with Vygotskian theory allows a more democratic atmosphere to develop within a classroom, in

which all students have a voice and contribute to the overall social development in the classroom community. My hope is that implementing the methods which are discussed in the project can lead to exciting and dynamic changes in the classroom.

CHAPTER TWO: REVIEW OF THE LITERATURE

The work of the late Russian psychologist Lev Vygotsky led him in search of understanding the development of the human being. Vygotsky developed his theories in the 1920s and 30s, but due to his untimely death in 1934, Stalinist repression during the latter part of his career, and the misinterpretation of his work, the true breadth of his insights were not appreciated until the translation of his research beginning in the 1960s. The application of his theory in education did not occur until the late 1970s and was not implemented in the mainstream until the 1990s.

Vygotsky recognized that a given individual could not be analyzed individually, but that development must be viewed in relation to the cultural, historical and institutional context in which that individual exists. In addition to this insight, he recognized the role that mediating artifacts play in human activity. Humans are born into an environment that is shaped by the activities of previous generations. In this environment, they are surrounded by artifacts that carry the past into the present (Cole, 1998); by mastering the use of these artifacts and the practices in which they are employed,

humans are able to assimilate the experiences of humankind (Leont'ev, 1981).

Educational practices based on Vygotsky's notions of human development have profound effects on the nature of teaching within the classroom environment, and are largely contrary to traditional classroom practices. His theories support social constructivism. The first section of this paper will discuss Vygotsky's ideas on the origins of human behavior, and outline major points of his psychological theory. The second section reviews the contributions of post-Vygotskian scholars who have developed activity theory along the same lines as Vygotsky's theoretical assumptions. The third section presents classroom activity settings and social learning contexts based on a Vygotskian perspective. The fourth section discusses psychological tools with an emphasis in increasing reading comprehension. Finally, the last section reviews strategic reading comprehension activities.

Social Origins of Human Behavior

Emergence of Consciousness Through Social Activity

The underlying principles of Vygotsky's social constructivism are that higher mental functions are formed in the course of an individual's interaction with the

social environment, and tools (technical and psychological) mediate this interaction. Any human action includes both the individual and the mediational means employed (Wertsch, 1991). To Vygotsky, the connection between the individual and the social is necessarily relational. He postulated that "socially meaningful activity may serve as an explanatory principle in regard to, and be considered as a generator of, human consciousness" (Kozulin, 1986, p. 264).

Vygotsky argued that in order to understand the individual one must also understand the social context in which the individual exists. In the statement, "the first problem [of psychology] is to show how the individual response emerges from the forms of collective life" (1981a, p. 165), Vygotsky is clear about his intention to establish a connection between human social activity and mental functions. Vygotsky's postulate of the sociocultural origin of human thought meant that the organization and structure of social interactions in a particular activity within a particular sociocultural context determine the structure and organization of consciousness. Thinking develops differently depending on the particular setting or context in which it occurs.

Semiotic Mediation

Vygotsky argued that higher mental functions and human action are mediated by tools and signs. His approach to studying language and other sign systems was in the context of how they are mediated by human action. Vygotsky stated that not only did tools mediate action, but

by being included in the process of behavior, the psychological tool alters the entire flow and structure of mental functions. It does this by determining the structure of a new instrumental act, just as a technical tool alters the process of a natural adaptation by determining the form of labor operations" (1981b, p. 137). Vygotsky did not limit his notion of psychological tools to speech; he included "various systems for counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps and mechanical drawings; all sorts of conventional signs; and so on. (1981a, p. 137)

The tools described by Vygotsky would not necessarily be the same in every culture, but would be specific to the contexts in which they are being used.

Although Vygotsky was interested in human mediated activity with all psychological tools, he spent a great deal of time on his analysis of semiotic mediation. Vygotsky (1962/1986) asserted that higher mental functions are first determined through the discourse patterns which occur on the intermental plane in a social setting. A major aspect of Vygotsky's theory of social development is his "genetic law of cultural development." Through this, he stated that higher psychological functions first appear socially before being internalized by an individual:

Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition. (Vygotsky, 1981a, p. 163)

A major issue to Vygotsky was how external mental processes are transformed to create internal mental processes (Wertsch, 1985). Vygotsky (1981a) believed that lower mental behaviors are gradually transformed into

higher ones through social interaction. Vygotsky's bridge between the external social functions and internal functions was through semiotic mediation. His argument was that human consciousness is formed in the individual only after the individual has mastered semiotically mediated processes and categories in social interaction. According to Vygotsky, "Any higher mental function was external because it was social at some point before becoming an internal, truly mental function" (1981a, p. 62). What begins as external social speech becomes transformed first into egocentric speech, and ultimately into inner speech which becomes the child's most important psychological tool for structuring thought.

Piaget described his notion of egocentric speech as being a child's speech for his own use and not for use with others. He argued that upon socialization this egocentric speech disappears (Piaget, 1926). Vygotsky's notion of egocentric speech differs radically from Piaget's, and is a key component in his theory. Vygotsky argued that egocentric speech is a bridge between external inter-psychological functioning and internal intra-psychological functioning. He stated that human development is social first, then becomes egocentric, and finally transforms into

inner speech (1986, p. 19). The concept of internalization is a part of the larger concern of the acculturation of the child. Internalization cannot be isolated from the larger social context of the activity. A child's mastery of language in a social interaction is a precursor to mastering the language which will be internalized.

Concept Formation

Vygotsky made a distinction between two different types of concepts: spontaneous and scientific. Spontaneous concepts develop as a result of a child interacting with the environment and occur unsystematically and are highly contextual. They are reflections on daily experiences. Scientific concepts are decontextualized and usually occur in a specific classroom activity. These concepts are systematic and logical and are rooted in specialized and operationalized instruction. According to Vygotsky (1986) the understanding of the spontaneous concepts builds from the bottom-up, while scientific concepts develop top-down. The latter are mediated through words, while the former is directly seen or experienced. Scientific concepts develop through verbal interactions where the word is used as a thinking tool, while the child progresses through the stage of potential concepts. This theory of concept formation

provides insight into why it is important for students to tap into their prior knowledge before learning a new concept or reading new texts. Those students who cannot make a connection between their knowledge about the world (spontaneous concepts) and the scientific concepts learned in school will have great difficulty in internalizing a given concept.

Zone of Proximal Development

An interesting aspect of Vygotsky's theory is his "zone of proximal development" further referred to in this paper as the ZPD. By using the foundation of the "genetic law of cultural development," with the assumption that mental processes occur socially before being internalized, Vygotsky developed a tool to identify two states of mental development: an actual developmental level and a potential developmental level. Vygotsky (1978) defined the ZPD as the "distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

If the actual developmental level of a child defines abilities which have already matured in the child, and the

ZPD defines the functions which are in the process of maturation, then pedagogical methods will work within the child's ZPD to further the development of internalized concepts. Vygotsky stated, "the only good learning is that which is in advance of development" (1978, p. 89). Effective teaching will therefore emphasize instruction before development within a social context.

For a ZPD to be created, there must be a joint activity that creates a context for student and expert interaction. According to Tharp and Gallimore (1988) there is no single ZPD for individuals because the zone varies with culture, society and experience. The expert may then use multiple instructional strategies within the social interaction as well as model appropriate solutions, assist in finding the solution, and monitor the student's progress. Dixon-Krauss (1996) also notes "while the teacher is interacting with the student, she continuously analyzes how the students think and what strategies they use to solve problems and construct meaning" (p. 20). While working within a student's ZPD the teacher must decide how much and what type of support to provide, as well as remaining flexible in meeting the "on the spot" needs of students.

Although Vygotsky referred to the ZPD in his discussions of child development, Wells (1996) argued that

Table 2.1. Eight characteristics of an expanded conception of the zone of proximal development (from Wells, 1996)

1	The ZPD may apply in any situation in which, while participating in an activity, individuals are in the process of developing mastery of a practice or understanding of a topic.
2	The ZPD is not a context-independent attribute of an individual; rather it is constructed in the interaction between participants in the course of their joint engagement in a particular activity.
3	To teach in the ZPD is to be responsive to the learner's current goals and stage of development and to provide guidance and assistance that enables him/her to achieve those goals and, at the same time, to increase his/her potential for future participation.
4	To learn in the ZPD does not require that there be a designated teacher; whenever people collaborate in an activity, each can assist the others, and each can learn from the contributions of the others.
5	Some activities have as one of their outcomes the production of an artifact, which may be used as a tool in a subsequent activity. Representations-in e.g. art, drama, spoken or written text-of what has been done or understood are artifacts of this kind; engaging with them can provide an occasion for learning in the ZPD.
6	Learning in the ZPD involves all aspects of the learner and leads to the development of identity as well as of skills and knowledge. For this reason, the affective quality of the interaction between the participants is critical. Learning will be most successful when it is mediated by interaction that expresses mutual respect, trust and concern.
7	Learning in the ZPD involves multiple transformations; of the participants' potential for future action and of the cognitive structures in terms of which it is organized; of the tools and practices that mediate the activity; and of the social world in which that activity takes place.
8	Development does not have any predetermined end, or telos; although it is characterized by increasing complexity of organization, this does not, in itself, constitute progress. What is considered to be progress depends on the dominant values in particular times and places, which are both contested and constantly changing. The ZPD is thus a site of conflict and contradiction as well as of unanimity; the transformations it engenders lead to diversity of outcome which may destroy as well as reproduce existing practices and values.

the concept is applicable to humans of all ages and developmental levels. He recognized the importance of the concept of the ZPD and has extended it beyond Vygotsky's initial notion. Wells recognized the need to elaborate on the application of Vygotsky's initial ZPD principles by excluding the need for a "teacher" or "superior peer" in the context of social interaction because by participating in joint activity all members contribute and learn from one another. Wells also noted that recognition of a conflict within a joint activity might lead to a transformation of ideas. Table 2.1 shows Wells' extension of Vygotsky's original idea on the ZPD.

Implementing pedagogy which is directed at students' learning to their greatest potential creates a context in which the highest degree of learning can occur. By learning at their highest levels, students cannot work independently. Learning must occur through joint, mediated activity.

Sociocultural Situatedness of Mediated Action

Wertsch (1991) argued that it was necessary to extend Vygotsky's ideas to focus on the sociocultural situatedness of mediated action in the intermental plane. He stated that it is "the sociocultural situatedness of mediated

action that provides the essential link between the cultural, historical, and institutional setting on the one hand and the mental functioning of the individual on the other" (p. 48). In order to form this link Wertsch refers to the ideas of Bakhtin on utterances. In Bakhtin's theory a spoken or written utterance is always expressed from a certain perspective or point of view which reflects certain values. Bakhtin also stressed the existence of voice which always exists in any social environment and occurs with other voices. Wertsch states, " an utterance, spoken or written, is always expressed from a point of view [a voice]...and is an activity that enacts differences in values." (1991, p. 51).

According to Bakhtin (1981), dialogicality is the interaction of two or more voices. Voices always exist in a social environment and cannot exist in isolation from other voices. This social situatedness of each utterance puts each speaker in covert dialogue with each element of social language that has gone before. Therefore, in producing an utterance a speaker always summons a social language, which shapes what the speaker's individual voice can say (Wertsch, 1991). Bakhtin (1981) referred to a specific dialogicality and multivoicedness which he called

ventriloquism which is when one voice speaks through another:

The word in language is half someone else's. It becomes 'one's own' only when the speaker populates it with his/sic own intention, his own accent, when he appropriates the word, adapting it to his own semantic and expressive intention. Prior to this moment of appropriation, the word does not exist in a neutral and impersonal language, but rather it exists in other people's mouths, in other people's concrete contexts, serving other people's intentions: it is from there that one must take the word, and make it one's own.

(pp. 293-294)

When one speaks one shares voice with others who have gone before. In the context of human interaction, face to face or with a text, there is always a representation of shared values, beliefs, and intentions.

Properties of Mediated Action

Wertsch (1998) further analyzed the properties of mediated action by focusing on the agent (who is doing the action) and the instrument (mediational means). He concluded that cultural tools should not be viewed as determining action in a static and mechanistic way; it must

be recognized that tools only have an impact when an agent uses them. Another point Wertsch made about mediated action is in regard to multiple goals of action. He stated, "multiple goals and the complex relationships that exist among them are essential issues to consider when trying to interpret mediated action" (1998, p. 34). Viewing mediated action from the viewpoint of a single goal is limiting. Action must be analyzed from the perspective of the complex dialectics among the elements of mediated action.

Vygotsky made the assumption that mental functioning can be understood only if the origin and transformations they have undergone are understood. Wertsch (1998) asserted that mediated action is situated on one or more developmental paths, and development involves a great deal of contingency and accident. These contingent events may greatly effect development. "A change in cultural tools may often be a more powerful force of development than the enhancement of individual's skills" (p. 38). When considering a change in development, changing a cultural tool may be more successful than the skill for using a tool. In applying this idea to education, if increased reading comprehension is the goal, a change in the

mediational tool may be the key to success in achieving increased output.

The Activity System

As discussed in the previous section, Vygotsky believed that an individual never reacts directly to the environment. Tools and signs mediate the interaction. Thus, consciousness is not situated inside the head of the individual, but within the interaction which occurs in a cultural, historical and institutional context.

Researchers at The Center for Activity Theory and Developmental Work Research at the University of Helsinki (1998) distinguish among three generations of the activity theory. The first generation is Vygotsky and his notion of mediation. Vygotsky's student Leont'ev is considered to have developed the second generation of the activity theory. Leont'ev included the aspect that consciousness and meaning are formed in joint, collective activity, where the subjects share a division of labor, rules, and a common objective. Through this definition of an activity system the focus of study is no longer on the individual acting with mediational means, but on the interaction between the individual, the artifacts (tools) and other individuals in historically developing institutional settings. According

to Leont'ev (1978), work is performed through tool mediation, but only in joint, collective activity. Humans can only relate to nature through relation with other people, which means that labor appears from the very beginning as a process mediated by tools and mediated socially. The third generation of activity theory is what is now being experienced. More focus is being given to the various aspects of cultural diversity, multiple perspectives and voices. This third generation also views the way activity systems interact with one another.

To Leont'ev, collective activity is connected to object and motive, of which the individual subjects are often not consciously aware. Individual action is connected to a more or less conscious goal, and every activity has an object (Leont'ev, 1978). The object, which is created by human need, determines the scope of possible goals and actions. A single motive can give rise to different goals and can produce different actions.

Leont'ev's concepts form a bridge from Vygotsky's writings to current views of activity theory, but part of his analysis has come under scrutiny as straying from Vygotsky's original intentions. Due to his relationship with Vygotsky, he was considered by many scholars to be the

chief interpreter of his ideas (Kozulin, 1986). In analyzing Leont'ev's theory of activity and comparing it to Vygotsky's ideas, Kozulin differentiates between the two when he states "Vygotsky's theory views higher mental functions as a subject of study, semiotic systems as mediators, and activity as an explanatory principle. In A. N. Leont'ev's theory, activity, now as activity, and now as action, plays all roles from subject to explanatory principle" (1989, p. 273). Nonetheless, other aspects of his theory are considered valuable and serve as a bridge to the next generation of activity theory.

The Engeström Model

Although Leont'ev expanded Vygotsky's idea of human activity, he did not graphically model this concept. The Engeström model (Figure 2.1) shows the inter-relatedness of the components within an activity system.

In the model several components of an activity are depicted; subject, object, instruments, community, division of labor, rules, and outcome. The subject refers to the individual or sub-group who is chosen as the point of view in the analysis. The object refers to the raw material or object space at which the activity is directed and which is

molded and transformed into the outcome. Subjects will mediate their actions with physical and symbolic, external and internal instruments (tools and signs). The community is comprised of individuals and/or sub-groups who share the same general object and who construct themselves as distinct from other communities. The division of labor

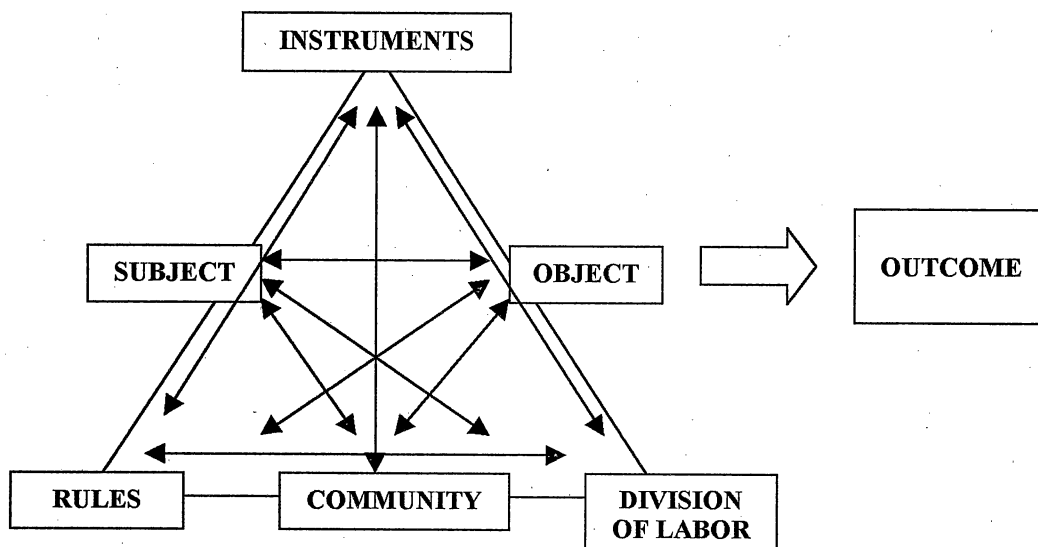


Figure 2.1. The structure of a human activity system (Engeström, 1987, p. 78)

refers to both the horizontal division of tasks between the members of the community and to the vertical division of power and status.⁷ Finally, the rules refer to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system (Engeström, 1987). In this model, social mediation

is characterized by division of labor and rules mediating the interaction between the individuals in the activity system. Using the collective activity as a unit of analysis connects the psychological, cultural, historical and institutional perspectives. It clearly shows that the activity of the individual is not viewed in isolation, but is tied to the larger cultural context. Human activity is socially-bound and not simply the sum of individual actions (Engeström, 1996).

In using the Engeström model one must consider its dynamic nature. A change in the design of a tool may influence a subject's orientation toward an object, which in turn may influence the cultural practices of the community, or a change in a cultural practice may inspire the invention or re-modeling of a tool. The model provides a view that recognizes the socially shared nature of human activity as well as the changing nature of activity systems in general. A change in any aspect of the model may effect the others.

Educational Activity System

By using the activity system to analyze human activity, it can be applied to a number of traditions including education. The model can be concretized by using

an educational example in considering the work activity of a teacher. The object of his/her work is the success of students. The outcome is the student's mastery of a specific, predefined set of concepts and skills. An unintended or undesired outcome may be the student's lack of achievement. The instruments include any tools utilized during the activity such as language or other semiotic medium, texts, computers, manipulatives, and previously internalized concepts and methods. The community consists of those within the classroom: the teacher, students, and perhaps aids. The division of labor determines the tasks and decision-making powers of those within the community. The rules regulate the use of time, measurement of outcomes, behavioral guidelines and the use of instruments.

The model from the point of view of a student looks different than from the teacher's perspective, due to the heterogeneous and multi-voiced nature of an activity system. Both the teacher and the students have the same overall outcome-mastery of specific concepts and skills, yet because of their different histories and positions in the division of labor, they construct the object and the other components of the activity in different, partially overlapping and partially conflicting ways. The activity

system is therefore a site where there is constant construction and renegotiation occurring between the various components and individuals involved. What initially appears as an object may soon be transformed into an outcome, then turned into an instrument, and perhaps later into a rule (Engeström, 1996). For example, a math problem is introduced as a problem, is collectively worked out and the concept internalized by the individuals, and becomes a rule upon which other math problems are built.

Activity systems do not exist in isolation. Participants in other activity systems may hand down rules. In the above mentioned example, an administrator may decide on how to measure the student's performance, what the students should learn, and to some degree the tools they may use and the methods of the teacher. Society can be thought of as a set of overlapping activity systems with their associated communities of practice which, taken together, are the culture-specific means of producing and reproducing the conditions of human existence (Wartofsky, 1979). According to Wells (1999), a society is maintained and developed by the particular individuals who contribute to its activity systems at any particular point in time. From this perspective, the formation of individuals, their

identities, values and knowledgeable skills, occurs through their participation in some subset of these activity systems, starting with family activities, school activities and going on to work and leisure activities (Wells, 1999). Learning is not a separate and independent activity, but an integral aspect of participation in any community (Lave & Wenger, 1991)

Cultural Historical Activity Theory (CHAT)

According to Cole, CHAT is a branch of cultural psychology which can be applied to education in the development of new activities. This perspective acknowledges the culturally diverse background of today's student body. CHAT principles are grounded in the theories of Vygotsky, placing culture at the center of its concerns.

The CHAT principles as outlined by Cole are listed in Table 2.2. Cole argued that the level of activities should be the focus on how to organize diversity in educational settings because activities are the locus of culture creation and use (Cole, 1998). From this perspective, educators can examine which activities, tools, and pedagogical strategies are most useful and successful for dealing with diversity.

Cole also recognized that within an activity

Table 2.2. Principles of cultural historical activity theory (from Cole, 1998)

1	The basic premise of a CHAT approach is that human beings have the need and ability to mediate their interactions with each other and the non-human world through culture.
2	Culture is conceived of as human beings' "social inheritance." This social inheritance is embodied in artifacts, aspects of the environment that have been transformed by their participation in the successful goal-directed activities of prior generations. They have acquired value.
3	Artifacts, the constituents of culture, are simultaneously material and ideal/symbolic. They are materialized in the form of objects, words, rituals and other cultural practices that mediate human life. They are ideal in that their form has evolved to achieve pre-scribed means to pre-scribed goals, and these have survived to be our tools for our use. Culture is exteriorized mind; mind is interiorized culture.
4	The "effective environments" of mental life are taken to be the different practices or forms of activity the person engages in. That is, human psychological processes are acquired in the process of mediating one's interactions with others and the physical world through culture and its central medium, language. Humans are created in joint, mediated, activity.
5	Consequently, it is by analyzing what people do in culturally organized activity, people-acting through mediational means-in context, that one comes to understand the process of being human. Mediation of action through culture in social interaction is the essential precondition for normal human development.
6	Since cultural mediation is a process occurring over time, a CHAT perspective emphasizes that it must be studied over time. Time itself is conceived of with respect to four embedded domains: (1) phylogenesis, the history of our species, (2) cultural-history, the history of the cultural group into which we are born, (3) ontogeny, the history of an individual human being, and (4) microgenesis, moment to moment interactions which are the proximal locus of experience. An implication of this view is that all human beings are fundamentally hybrids of phylogenetic and the cultural.
7	In addition to focusing researchers on time and change, a CHAT perspective requires them to focus on the social/spatial ecology of the activities they study-the relation of activities to their institutional arrangements. With respect to formal education, for example, instructional interactions are constitutive of lessons which along with other forms of activity are constitutive of classrooms which are constitutive of schools which are parts of communities, and so on. Here one quickly encounters issues of diversity not only between communities, but also within them. There are many kinds of history, embodied in many different cultural traditions. There are many kinds of history associated with social class, ethnicity, religion, and language, to be found in virtually every town and city [the United States].
8	A CHAT perspective places a special emphasis on the principle of multivoicedness, the principle that every form of human interaction contains within it many different selves, arranged in multiple, overlapping, and often contradictory ways. The contradictions, experienced by us as conflicts, are a major source of change.
9	The test of the theory is its success in guiding the construction of new, more humane forms of activity.

(educational or otherwise), there are "patterned ways of co-confronting life with one's social group ...by which parts of the vast pool of cultural knowledge are made a part of the conduct of current actions" (1996, p.4). The cultural history of the individual participants of an activity contributes to the learning and development which occurs within it.

In developing activity settings within a classroom it is important to realize the cultural influences which occur within the activity space. This influence is voiced through the participating individuals and affects the others in the activity. The culture of the participants comes together in the educational activity to form a new culture, one which is created by all the contributors in the group.

Classroom Activity Settings

A learning context must facilitate social interaction in order for students to maximize their potential for learning within their ZPD. Implications resulting in a student's increased performance within the ZPD requires a closer look at the activities which occur within a classroom environment. If a student is to perform at this level an appropriate activity setting must exist.

According to Tharp and Gallimore, "activity settings of the classroom must be orchestrated to allow instructional conversations, joint productive activity, and assistance to performance in the ZPD" (1988, p. 161).

Cooperative Learning

In cooperative learning, students work collaboratively to achieve a mutual goal. A traditional classroom setting often features the teacher in the role of transmitter as opposed to the teacher as facilitator. The teacher-as-transmitter approach clearly defines the students' role in the classroom as one of passive learner. In this situation the students typically complete their tasks independently and often without discourse. Unlike a traditional classroom, the social situatedness of a collaborative activity allows for multiple voices to interact. In a collaborative activity setting, students participate in a mutual task in which the group or partners create a product which could not have been produced individually. Building on Vygotsky's principles, collaborative learning is an ideal activity setting to promote higher psychological functions in individuals through a social context. The tools to reach the goal of potential performance in the ZPD are interpersonal and intrapersonal dialogues, or

collaboration (Dixon-Krauss, 1996). Interactions for knowledge require that all participants, teacher and students, have an active part. Without social interaction, meaning of context and content would not exist, and internalization would not occur. Collaborative learning provides an opportunity for children to interact with others and forces them to think and to communicate about their thinking (Jennings & Di, 1996).

Research by Perret-Clermont (1980) indicated that within a collaborative activity students may present conflicting resolutions to problems, which are mutually agreed upon through further discourse. Therefore, the conflicting ideas lead the participants to consider solutions they would not have thought of individually. Perret-Clermont's research also indicated that peers could perform tasks together before they could perform them on their own, giving evidence to support Vygotsky's theory on the ZPD.

Organizing Collaborative Activities

Within a collaborative activity setting, learners have specific purposes which are an integration of cognition and context (Rogoff, 1982). Collaborative learning activities are goal oriented and the work division is dependent upon

the specific goal of the activity (Tharp & Gallimore, 1988). When designing a collaborative activity setting the criterion is that it should allow a maximum of assistance by learners of the tasks at hand. The activity must be designed to allow teachers to assist students through the ZPD toward the goal of developing higher mental functions. Later activities should allow for students to assist one another until the students can self-regulate their learning in the particular concept or strategy.

The organization of collaborative activity settings should begin with orienting the students toward an understanding of the purpose of this type of activity, as well as the goal and useful strategies to be employed. It may be the implementation of a strategy, reading comprehension, or a math problem which is the goal of a particular collaborative activity. In order for the smaller activity groups to function smoothly, there must be some explanation in a class wide context as an overview (Tharp & Gallimore, 1988). Without success in this stage it is possible the groups may have difficulties in reaching their goals when working collaboratively. Once an overview is explained, the teacher can guide the students through the procedure until they are ready to work in peer groups.

Throughout the activity students should be working in their ZPD and implementing strategies that help them monitor and evaluate their understanding and progress toward the goal.

Johnson and Johnson (1989) have described the essential components of cooperative learning as: heterogeneous grouping, positive interdependence, individual accountability, and the teaching of social/collaborative skills. All four of these components must exist for the collaborative activity to succeed.

Heterogeneous groups should reflect diversity in culture, personality, as well as ability level, in order for participants to maximize learning in a group. Groups should be divided by the teacher or be randomly selected, rather than chosen by the students to allow for the highest level of success (Whistler & Williams, 1991).

Members of the group should feel they must work together to achieve the goal (positive interdependence), and without doing so, cannot succeed. Activities should be organized in a manner that requires students to work collaboratively, such as the division of labor, sharing supplies, a single group product, and group rewards. In order for students to achieve a level of working

collaboratively, they may need to participate in activities directed toward team building.

To ensure participation of all group members, activities must be organized to hold individuals accountable for their participation. Students within the activity are assigned specific roles which are clearly defined. All members of the activity group have a designated role, and these roles should rotate in each new activity so all students can have the opportunity to participate in the various roles. The teacher should clearly model the task and behavior of all the roles, and provide a cue sheet to help the student in taking over the role. The teacher should clearly identify in which ways the students will participate and be held accountable for their portion of the labor. Suggestions from Whistler and Williams (1991) are to randomly select a student to explain the work or answer a question, doing group work on butcher paper or overhead transparencies which are to be shared in front of the class, editing each other's work, selecting a single paper from the group to grade, or giving students individual tests to check for understanding.

In order for students to work in a joint activity they must first learn the necessary social skills to function

productively in such a context. The rules that govern the behavior of students should be taught in three levels: defining the target behavior, modeling the behavior, and practicing the behavior (Klingner & Vaughn, 1999). These social skills should be taught one at a time and can be documented on a poster within the classroom as a resource. Important social skills for students to acquire are listening, reaching agreement, sharing information, taking turns, checking for understanding, and using positive praise words (Whistler & Williams, 1991).

Group Learning and Reading Activity

The purpose of working collaboratively while engaging in reading activities is to achieve joint understanding of the text. Palincsar and Brown (1988) have observed that

peers are frequently in a better position to assist one another in comprehension activity since they are more likely to be experiencing the same kind of difficulty in comprehending the text than teachers, for whom comprehension occurs with relative automaticity. (p. 57)

The specific tasks in a reading group may be a variety of strategies for the students to employ, giving them practice in a supporting context. Allowing students to

practice strategies with their peers creates a context for them to engage in dialogue about the text, as well as how to utilize the strategies.

Students who develop their reading comprehension skills in a collaborative context have the opportunity to experiment and practice new strategies using the support of their peers and teacher. Students who do not have this opportunity to practice these strategies in a safe context such as a peer group may not understand how to implement them individually, nor venture to experiment with new methods of reading.

Psychological Tools

Developing a "Toolkit"

Vygotsky was particularly interested in how human action is mediated by psychological tools. Wertsch (1991) extends Vygotsky's concept of tools to include the diversity of mediational means available to human beings. Wertsch writes, "that mediational means be viewed not as some kind of single, undifferentiated whole but rather, in terms of the diverse items that make up a *tool kit*" (1991, p. 93; emphasis in original). Using a "tool kit" approach to analyzing mediated action addresses the issue of why one psychological tool is used in a certain context for a

certain task over another. As Wertsch noted, "different groups may employ similar tools in different ways" (1991, p. 95). Wertsch also discussed the privileging of mediational means within a culture. He defined privileging as that "one mediational means, such as a social language, [which] is viewed as being more appropriate or efficacious than others in a particular sociocultural setting" (1991, p. 124).

It is possible for people not to be aware of the range of available psychological tools they can employ in a context, and "it is often only when confronted with a comparative example that one becomes aware of an imaginable alternative" (Wertsch, 1991, p. 126). In organizing more effective pedagogical practice it is valuable to raise the conscious awareness of students so that they can recognize which tool is most powerful and useful in a variety of contexts. It should then be of primary importance to add knowledge of a variety of tool use to a student's repertoire of problem solving approaches. Students should engage in scholastic activities where they work jointly in problem solving and collectively choose which tools to appropriate for a task. This knowledge which is learned through mediated joint activity will later be used by the

student to work through tasks independently. As Vygotsky said, "In their own private sphere, human beings retain the functions of social interaction" (1981a, p. 164).

Reciprocal Teaching

Palincsar and Brown have devised a method of teaching students the use of psychological tools in the context of reading comprehension. They based their methods on the current body of research on strategies employed by effective readers. They identified four areas in which good readers are proficient. The four areas are summarizing, questioning, clarifying, and predicting. They developed a procedure for encouraging students to gain mastery in and appropriate these strategies.

This technique allows students to work within their ZPD in a group context. The teacher first demonstrates which questions are appropriate for a particular reading based on the four strategies mentioned above. The teacher then coaches students as they take over the role of the guide in these discussions. Throughout this process students receive explicit instructions on the technique. They observe and imitate the teacher's modeled activities, and receive feedback from the teacher on their success in generating appropriate questions to the group for

discussion. The goal is for students to take an active role in posing appropriate questions in a group context, and ultimately when reading independently the student uses the same strategy to understand the text. A clear example is listed in the following passage from Palincsar, Brown, & Campione (1993):

The dialogue leader (adult or child) begins the discussion by asking questions about the context of the text. The group discusses these questions, raises additional questions, and, in the case of disagreement or misunderstanding, rereads the text. Whereas the questions are used to stimulate discussion, summarizing is used to identify the gist of what has been read and discussed and to prepare the group to proceed to the next portion of the text. Once again, there is discussion for the purpose of achieving consensus regarding the summary. The third strategy, clarification, is used opportunistically for the purpose of restoring meaning when a concept, word, or phrase has been misunderstood or is unfamiliar to someone in the group. Finally, the discussion leader provides

the opportunity for predictions regarding upcoming content. Group members generate their predictions based on their prior knowledge of the content of the text as well as clues provided in the text itself (e.g., embedded questions). (pp. 43-44)

Through successful use of these strategies on the intermental plane during an activity, students who have difficulty comprehending text can successfully adjust their intramental processes. According to Palincsar and Brown (1984), this procedure usually requires at least five sessions to implement successfully. This is due to the change of power within the discourse pattern of the activity. The teacher gradually gives up the power to the students who become the discussion guides, and hold more power in the interaction. This is not easily accepted due to the nature of formal teaching in most classrooms. Thus the training in the choice and use of psychological tools becomes a feature of instruction, one that may involve a period of time to institute.

Cognitive Education

Cognitive education can be described as a way to

explicitly teach learners thinking skills which they can appropriately apply to various scholastic activities, thus training students to use psychological tools. Students are taught the name and purpose of the strategies, and observe modeling by the teacher and participate in guided practice before using it independently. According to Kozulin (1995), due to a "lack of experience with the higher order psychological tools...cognitive education should become an integral part of school curricula and teacher development" (p. 67).

Cognitive, metacognitive, and affective strategies.

Learning strategies are psychological tools which enable students to take an active role in their own learning process. The difference between these two strategies is that cognitive strategies make students effective and purposeful learners, and metacognitive strategies make them conscious of their own powers of thinking (Quillmalz, 1987). Cognitive strategies are usually connected to a specific task while metacognitive strategies have broader applications. By knowing how, when, and why to use cognitive and metacognitive strategies, a learner can direct the outcome of a scholastic task such as reading comprehension. These strategies can be taught explicitly

to students through scaffolded instruction. In teaching students to use these psychological tools the teacher models the strategy until the student can adequately use it independently. As a learner works through his ZPD he becomes competent in its use and can implement the strategy.

Cognitive strategies are used deliberately by the learners to consciously aid them in selecting, processing, and organizing information. A specific strategy is chosen based on the task at hand. For example, if the task is reading comprehension the learner will choose a strategy such as summarizing to aid in understanding the text. The teacher should help students to understand which strategy will work best for a specific task.

Metacognitive strategies are used by the learners to reflect on their learning efforts. According to Chamot and O'Malley (1994), metacognitive strategies are used for "planning for learning, monitoring one's own comprehension and production, and evaluating how well one has achieved a learning objective." (p. 60). As students master metacognitive strategies they can gain control of their learning process by stepping away and thinking about these mental processes.

Affective strategies are important for students to implement because they can help them be more productive in a group activity setting. Students who feel uncomfortable or nervous cannot learn as effectively as if they were relaxed and at ease. In order for students to be productive and successful while working in a group, they must be confident enough to ask questions for clarification when they do not understand the information. The affective filter is the degree to which emotional factors such as anxiety influence student learning. If the students' affective filters are high, they may not meet the learning objective of the activity (Krashen, 1982). Although Krashen's hypothesis applies to second language learners, affective factors such as self-esteem, attitude, confidence and introversion/extroversion directly influence the way someone interacts with others (Diaz-Rico & Weed, 1995), and can apply to all learners. Students can assist their learning by implementing affective strategies.

The specific strategy chosen as a psychological tool in a task depends upon the subject area. Table 2.3 shows cognitive, metacognitive, and affective strategies for reading comprehension. When students consider such questions as how they think, how they learn, and how other

Table 2.3. Strategies for literature and composition
(Chamot & O'Malley, 1994, p. 296)

Metacognitive Strategy	Questions for Implementation
Advance Organization	Can the title and chapter headings help me get a general idea of what this story is about?
Selective Attention	What are the most important parts of the story?
Organizational Planning	What's my purpose for reading, listening, speaking or writing? How should I organize my story, book report, or presentation? How do I begin and end? What's the best sequence of ideas or events? How can I describe and present the characters?
Self Monitoring	Am I understanding this? Does it make sense? Am I achieving my purpose? How is this task going? Do I need to make any changes right now?
Self Assessment	Did I understand this story or poem? What was the main point I got from reading or listening? How do I feel about the story and characters? What revisions are necessary in my writing? Do I need more information?
Cognitive Strategies	
Elaborating Prior Knowledge	What do I already know about this type of literature or writing? What experiences have I had that are related to this? How does this information relate to other things I know about literature or writing?
Taking Notes	What's the best way to write down what I need to remember? Outline? Chart? List? Story Map? Drawing?
Grouping	How can I classify the characters or events in this story? Can I organize this information graphically?
Making Inferences	What does this word or phrase probably mean? What clues can I use? What predictions can I make?
Summarizing	What's the most important information to remember about this story? Should my summary be oral, written, or mental?
Using Imagery	What can I learn from the illustrations, diagrams, and pictures in the text? Can I draw something to help me understand this story? Can I make a mental picture or visualize this event or place or character?
Affective Strategies	
Questioning for Clarification	Who should I ask for additional explanation or correction or suggestions?
Cooperating	How can I work with friends or classmates to understand this or complete this task or improve what I have written or presented orally.
Self-Talk	Yes, I can do this-I just need the right strategies!

people can help them learn, they can implement strategies which will lead to better overall understanding.

Graphic organizers. In addition to language, sign systems and mathematical symbol systems, other symbolic tools are often used in helping a learner organize information visually. Graphic organizers are an example of symbolic tools. The use of graphic organizers is also a cognitive strategy which enables learners to manipulate information in a way that aids in comprehension and organization.

Graphic organizers portray the relationships among concepts and may take a variety of forms. They can be used in pre-reading, during reading, or in post-reading literature or content area activities. As a pre-reading activity students can make connections to what they already know, linking current to prior knowledge. During an activity a graphic organizer can clarify various aspects of the reading. As a post-reading activity graphic organizers can promote long-term comprehension of concepts due to the organizational form of the graphic display.

There are a variety of graphic organizers which can be used for organizing information to improve reading comprehension. Some examples are Chain of Events, Spider

Map, Continuum Scale, Human Interaction Outline, Story Sequence Chart, Main Idea Chart, Character Trait Web, Clustering, Story Maps, Compare/Contrast, Cycle, Fishbone, Problem/Solution, Storyboard, Venn Diagram, Learning Log, Synthesis Journal, Discussion Web, KWL Chart, and Semantic Map Or Word Web, T-Chart, And Tree Diagram (Jones, Pierce & Hunter, 1988). When students utilize these tools they can reorganize information in a more understandable way which helps facilitate task completion, reading comprehension, and concept formation. For an extensive set of examples of graphic organizers see Huang (1998).

Instrumental Enrichment (IE). A cognitive education system developed by R. Feuerstein introduces the learner to higher order psychological tools while providing intensive mediated learning experience (Kozulin & Presseisen, 1995). The intervention system in IE accompanies a dynamic assessment process. This system was originally developed to remediate learners with difficulties in psychological tool usage. The system has become widespread globally and is used with a variety of populations including special needs students, new immigrants, adults in vocational school and students in eclectic classrooms (Kozulin & Presseisen, 1995).

This method focuses on aiding learners in developing a toolkit which can be applied to various tasks helping them

Table 2.4. Six major functions of the Instrumental Enrichment method (from Feuerstein, Rand, Hoffman, & Miller, 1985)

1	To correct weaknesses and deficiencies in cognitive functions.
2	To help students learn and apply basic concepts, labels, vocabulary, and operations essential to effective thought.
3	To create learning motivation through habit formation in students whose conditions and environment do not reinforce learning needs.
4	To develop task-intrinsic motivation.
5	To produce insightful and reflective cognitive attitude.
6	To transform poor learners from passive recipients and reproducers of information into active generators, to enhance their self-image as active and independent learners.

to become active and independent learners. According to Feuerstein, learners who have significant cognitive function deficiency should be considered retarded performers and not retarded individuals. In this event the student is seen as having been mediationaly deprived, and the intervention program would involve teaching with mediational means to assist the learner in cognitive development. Some learners do not have exposure to higher order symbolic systems in their learning environment, particularly those from different cultures and require mediated instruction to assist in understanding abstract information (Kozulin & Presseisen, 1995).

Feuerstein and his colleagues (Feuerstein et al, 1980) developed 14 paper and pencil tasks called Instruments to be used by a teacher and learner to reconstruct mental processes and build cognitive skills. These instruments include the following areas: organization of visual field, analytic perception, orientation in space, comparative activity, categorization, temporal relationships, family relationships, decoding and encoding instructions, working with numerical progressions, transitive relations and syllogisms, and comprehension of absurd or humorous situations. The mediated learning occurs within the student's ZPD, allowing the learner to gradually internalize the concepts and apply the principles independently.

Psychological tools can be explicitly taught to learners who can then appropriate them accordingly in context. The greater number of psychological tools a learner has in a toolkit, the greater potential for problem solving skills that student can utilize to increase academic performance.

Reading Comprehension Strategies

Educators agree that a good reader is one who can construct meaning from text. The ability for a reader to

do so is dependent upon the reader's competency in applying comprehension skills such as questioning, summarizing, clarifying and predicting (Palincsar & Brown, 1988), as well as other strategies. Research findings indicate a strong support for strategy instruction. Expert readers use many strategies to process text, and strategies which are learned transfer to independent reading situations (Pressley, El-Dinary, Gaskins, Bergman, Almasi, & Brown, 1992), and good comprehenders use a wider variety of strategies on harder material (Kletztian, 1991). Therefore, cognitive education, or reading strategy instruction, is a critical part of a student's overall education.

Students sometimes confuse reading comprehension with task completion, therefore teachers must present students with the overall concept of what a good reader is, and what the skills are that good readers employ. A student may believe decoding words accurately and quickly makes a good reader, whereas a good reader understands that decoding accurately is a process in understanding vocabulary to help comprehend the text. It is necessary for the teacher and student to jointly identify the purpose of reading.

Good readers have the ability to monitor their comprehension and apply appropriate strategies or

psychological tools while reading. Students who do not spontaneously employ the use of reading strategies to help facilitate comprehension can be taught to do so. As discussed in Chapter 2, the context for teaching students to appropriate the correct tool or tools in reading activities can be taught through joint, mediated activity, where the student is learning within the ZPD while the teacher and other students apply the necessary scaffolding.

In processing text, the reader must activate relevant schemata to construct meaning. Schemata can be developed through the reading process in all three stages of reading: before-reading, during-reading, and after-reading. Table 2.5 shows the integration of content/cultural schemata, text processing schemata and linguistic/grammatical schemata into the three stages of reading (Jo, 1999, p. 57).

There are many reading strategies that students can learn to use independently through guided participation with others. Cognitive, metacognitive and affective strategies, reciprocal teaching, and the use of graphic organizers have already been discussed in Chapter Two.

Table 2.5. Sample organization of model in the reading process (Jo, 1999, p. 57)

	Content/Cultural Schemata	Text Processing Schemata	Linguistic/Grammatical Schemata
Before Reading	Strategies for Content <ul style="list-style-type: none"> • Strategy: Gaining Background Knowledge • Strategy: Recognizing Discipline-Specific Knowledge • Strategy: Brainstorming • Strategy: Using Cultural Notes 	Strategies for Identifying Genre <ul style="list-style-type: none"> • Strategy: Identifying Fiction • Strategy: Identifying Fiction Strategies for Literary Terms Strategies for Text Comprehension <ul style="list-style-type: none"> • Strategy: Skimming/Scanning • Strategy: Previewing • Strategy: Making Questions • Strategy: Semantic Mapping 	Strategies for Vocabulary Acquisition <ul style="list-style-type: none"> • Strategy: Previewing a Glossary
During Reading	Strategies for Culture <ul style="list-style-type: none"> • Strategy: Understanding International Culture • Strategy: Understanding Intercultural Communication 	Strategies for Text Comprehension <ul style="list-style-type: none"> • Strategy: Identifying the Main Idea • Strategy: Identifying Supporting Details Strategies for Review <ul style="list-style-type: none"> • Strategy: Taking Notes • Strategy: Underlining • Strategy: Annotation Strategies for Critical Thinking about Text <ul style="list-style-type: none"> • Strategy: Making Inferences • Strategy: Problem Solving 	Strategies for Paragraph Analysis <ul style="list-style-type: none"> • Strategy: Identifying Topic Sentence • Strategy: Identifying Logical Argument Strategies for Vocabulary <ul style="list-style-type: none"> • Strategy: Guessing Meaning Using Context
After Reading	Strategies for Culture <ul style="list-style-type: none"> • Strategy: Understanding Cultural-Specific Terms • Strategy: Compare and Contrast Cultural Aspects Strategies for Application <ul style="list-style-type: none"> • Strategy: Last Page Plus 	Strategies for Review <ul style="list-style-type: none"> • Strategy: Making Flash Cards Strategies for Text Comprehension <ul style="list-style-type: none"> • Strategy: Summarizing • Strategy: Storytelling • Strategy: What if? Discussion Strategies for Application <ul style="list-style-type: none"> • Strategy: Telegraph Plot 	Strategies for Sentence Analysis <ul style="list-style-type: none"> • Strategy: Identifying Well-formed Sentences Strategies for Word Analysis <ul style="list-style-type: none"> • Strategy: Identifying Parts of Speech Strategies for Vocabulary Acquisition <ul style="list-style-type: none"> • Strategy: Pictogram

The reading strategies that follow have been divided into these stages, however, several strategies can be utilized during more than one stage of reading.

Into-Reading

In the pre-reading, or Into stage, the teacher introduces the text and may briefly speak about the content. Key vocabulary may be taught and illustrations can be discussed. At this stage the readers make predictions about the content by using various clues. Background knowledge is assessed and misconceptions re-aligned. Pre-reading activities make the reading task easier and more enjoyable (Hansen), especially for those students having difficulty with comprehension (Palincsar and Brown, 1988).

Background knowledge. Construction of meaning occurs when the reader is able to connect prior background knowledge to the information in the text. If a reader cannot accurately do so, then as Palincsar and Brown suggest, "when prior knowledge is inaccurate, the demands of reading are even greater; the reader must not only construct the meaning of the text, but must simultaneously reconstruct prior conceptions" (1988). If there are

misconceptions in the background knowledge of a student, it is important for it to be detected so that the appropriate reconstruction can occur. These detections can be made through pre-reading activities when the student has the opportunity to share and compare information with others.

Previewing. As well as activating prior knowledge, in previewing a text the reader becomes familiar with elements such as the characters, basic plot, or content of the reading. For less competent readers learning challenging vocabulary is useful (Graves, Prenn, & Cooke, 1995). By previewing a text a reader can draw attention to the important aspects of a story, aiding in overall comprehension. Stanovich's (1980) interactive-compensatory model indicates that previews provide readers with top-down semantic and structural information before reading, allowing for a compensation with information the reader may not have acquired from the bottom-up.

Previewing text includes reading the title, subtitles, introductory paragraphs, and end of chapter or story questions and glossary. Through teacher mediation, important previewing questions can be asked to aid in focusing a student's attention to important information, allowing for more meaningful reading.

Predicting. This strategy can be used as a pre-reading activity as well as during the reading. Predicting can lead to increased motivation of students and help in keeping them engaged in reading as they anticipate the content of the text.

Skimming. In order to get an overview of text, readers can skim information to get clues to help understand main ideas and structure. By reading the first sentence in the main body of a paragraph, a reader can get a general understanding of the text. This strategy is effective with shorter texts, such as an article or a chapter (Anderson, 1985).

Pre-teaching vocabulary. Students must have adequate knowledge of vocabulary in order to comprehend text. For challenging text with difficult vocabulary it is useful for students to learn the words ahead of reading. Pre-teaching might involve semantic mapping and using pictograms (Johnson, 1989). By understanding key words, the entire passage may become comprehensible to the reader.

Memory strategies. Reading comprehension can be affected by a student's ability to recall previously learned information and linking it to what is currently being read (Rumelhart, 1977, Bernhardt, 1986). A student

who uses effective memory strategies can rely on prior experience, make meaningful associations, and can efficiently encode and retrieve information. In order to rapidly retrieve previously learned information a reader must use phonetic, visual, and semantic knowledge, auditory images, action, sensation, association, and grouping. In this way, the new information can be connected to what has already been learned.

Through-Reading

In the Through-reading stage, readers engage with the actual text. Some of the Into-strategies such as linking background knowledge, predicting, clarifying, use of memory, use of graphic organizers, and skimming, can also be used as through-reading strategies.

Summarizing. As students paraphrase information about a text they must synthesize it as well as make a decision about what is important in the text. Through summarizing a reader can become aware of the level to which he/she has comprehended the text; if it is necessary, one can ask questions or reread parts of the text for further understanding.

Questioning. Questioning has traditionally been the role of the teachers in their efforts to draw students'

attention to the important aspects of a text. In teaching students how to pose their own questions (eg. reciprocal teaching), teachers are creating an active, thinking reader who is able to dialogue with the text, rather than a passive one who must rely on external sources for directing attention to the relevant information.

Creating questions. The SQ3R (Survey, Question, Read, Recite, Review) questioning technique requires the reader to change the chapter subheading into questions (Robinson, 1946). This method of developing self-questions can encourage readers to focus on the main idea and check for understanding. This strategy helps to create a purpose for reading, increasing motivation of the reader.

Inferencing. By utilizing previously learned information and concepts, a reader can make an informed guess about word meaning, linguistic form, and the author's intended meaning. Meaning can be inferred by considering who, where, when, what, why, how, and the genre and style of the text.

Beyond-Reading

After the text has been read, students can participate in reflection and discussion. Strategies in the Beyond-reading stage include the following: going back to the

original predictions and making comparisons, summarizing, clarifying, reviewing notes, outlining, storytelling, using graphic organizers, critique, literary analysis, and relating the text to personal experience.

Instructional conversation. Using a natural form of discussion to develop ideas, reflect, and share a reading experience, students can further their understanding of a text through the use of this strategy. Instructional conversations are not merely free talking, but guided conversations aimed at eliciting discussion from a group of students about a certain idea or concept which is meaningful to them. This strategy has a high degree of participation, in which students create their own understanding of text and ideas.

Classification. Readers can strengthen their ability to comprehend text by classifying new words and expressions into meaningful units which aid in remembering the material. Such areas as vocabulary, topic, linguistic function, similarity or dissimilarity according to syntactic clues, can be classified by the reader. This classification allows the student to store information more easily for further use.

Problem-solving. Through the use of problem-solving, a reader makes both inductive and deductive inferences (Oxford, 1990). Readers are able to confirm their understanding by making inferences. According to Hosenfeld (1977), successful readers use a form of contextual guessing based on the process of inductive reasoning. Good readers identify rules of organization and patterns in order to later obtain information in way in which they can utilize it.

Practicing. When a reader revisits a text through another reading, rehearsal, application of the rules, imitation, attention to detail, recognizing and using formulas and patterns, and recombining, the reader is employing the strategy of practicing (Oxford, 1990). This interaction of the text in a variety of ways helps the reader in overall comprehension of the text.

Reading strategies are a necessary tool for students as they work toward developing reading comprehension skills. Students' abilities to appropriately apply reading strategies vary; however, all students can learn to use strategies. Once students understand when and how to use reading strategies, they become a valuable part of the students' tool kit.

Vygotsky's theories serve as a solid basis upon which others have built, in order to further his ideas and apply them to education. This theoretical base serves as a strong foundation upon which to create classroom environments and methods to increase the learning potential of students.

CHAPTER 3: THEORETICAL FOUNDATION FOR ACTIVITY

SETTINGS IN READING COMPREHENSION DEVELOPMENT

The purpose of this project is to develop a framework for dynamic, goal-oriented activity within a social context, to increase the reading comprehension of students. The framework is a practical application of Vygotsky's ideas which were discussed in Chapter Two.

Activity Setting for Reading Comprehension Development

This framework can be expressed as a model which guides instruction (see Figure 3.1). The model is based on the Activity System Model developed by Engeström (see Chapter Two). Engeström's model has been adapted to use in a classroom context where the components have been incorporated to direct student learning toward specific scholastic goals.

Description of the model

Complex human activity can be more easily understood when breaking up the components and arranging them in a model. The activity shown in the model is performed by a subject or human actor, who is motivated toward the object, and whose actions are mediated by tools, rules and the community. The model shows the outcome as

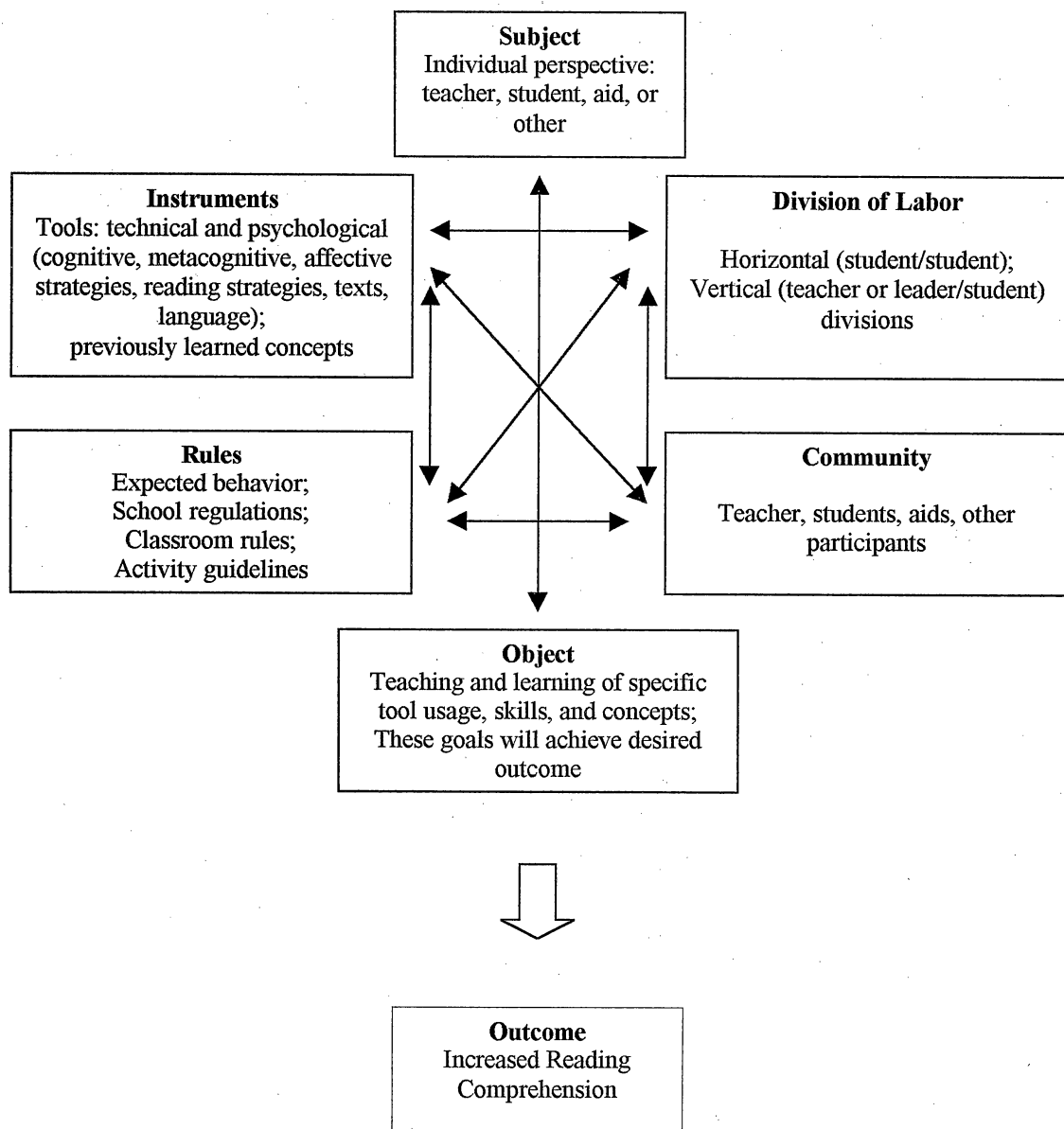


Figure 3.1. Activity system for developing reading comprehension based on the Engeström model

being an increase in reading comprehension; therefore the object must ultimately develop into such an outcome. The type of activity is determined by the object. Therefore, if reading comprehension is the outcome, the object must be carefully construed to direct the outcome. By understanding the socially distributed nature, as well as the transformative nature of the activity, it becomes possible to modify the outcome through the manipulation of the components within the model.

Components of the Model

The Engeström model views human activity as an inter-dependent system involving seven components (Table 3.1).

Table 3.1. Seven components of an activity system
(from Engeström, 1987)

1	subject
2	object
3	rules
4	division of labor
5	community
6	instruments
7	outcome

These components are not viewed from the individual's perspective, but rather from the point of view of the

larger social context to which it is connected. This system is dynamic and continually evolving.

Subject. The subject, or actor, is the individual viewpoint in the activity: either a student, teacher or other participant, such as an aide. The perspective, as seen through the subject, is viewed differently depending on the actor. For example, within a reading activity the teacher and student will not view the task in the same way, due to the different roles they perform in working toward the object.

Object. The object will ultimately be molded and transformed into the outcome through the human action and tool mediation of the community and subject during the activity. If the ultimate outcome is an increase of reading comprehension, then the object will be the motivator in achieving this goal, and will help direct the outcome. Learning a specific reading strategy can be a possible object for achieving an outcome of increased reading comprehension. The object can be molded and manipulated by the community to direct learning toward a specific outcome.

Instruments. Instruments are the tools, both technical and psychological, external and internal, that

are directed toward the object. Some tools which can be utilized for increasing reading comprehension are texts, cognitive, metacognitive, and affective strategies, reciprocal teaching techniques, and dialogue.

Rules. The rules are the explicit and implicit regulations and standard practices that constrain actions and interactions within the activity. In an educational activity, there are certain standards and models of behavior which are expected. A home environment would probably have different rules, thus altering the actions of the individuals within the activity. The rules of an activity with the purpose of increasing student reading comprehension may require the subjects' adaptation to a new standard of rules in order for the outcome to be achieved. The traditional teacher-as-transmitter, and student-as-passive learner roles, imply a set of rules contrary to those required for utilizing the activities discussed in this project.

Division of labor. The division of tasks is divided horizontally amongst students and vertically between the teacher and students. Where the teacher mediates student learning through modeling and guided participation, the student takes on some of these behaviors as they are

learned and internalized. The division of labor may need to be defined in order for an activity to reach the desired outcome.

Community. The community is the human environment within the classroom: teachers, students, aides, or others who participate directly in the activity. The actions of the subject are connected to the interactions with the community, thus making the community a necessary component of any activity. The different histories of the community members overlap within an activity and influence the development of the culture within the environment, and allow the representation of multivoicedness.

Outcome. The outcome is the desired goal of the activity; for example students' increased reading comprehension. The outcome is a direct result of the object and can therefore be manipulated, due to the dynamic nature of the model.

Utilization of the Model in the Classroom

The teacher has a great influence over the eventual outcome of the activity. Within a classroom environment, the teacher can guide the students toward an object and supply or teach students the instruments necessary for success. When considering reading comprehension as the

outcome of the activity, the teacher can teach strategies which students can use as tools to work toward the goal of the object. The object may be learning vocabulary words necessary in understanding the text. (If the initial tools are not successful, through monitoring the activity the teacher can make modifications to instruments, rules, division of labor and even the object to help facilitate success toward reaching the outcome.) To be truly effective, the teacher must constantly monitor the success of the activity and make adjustments as needed to reach the desired goal.

Each activity has a different object, and therefore students may not fully understand what their actions should be within the activity. In this event, it is of primary importance that the teacher modifies, clarifies and adjusts the various components within the activity in order to attain success.

CHAPTER FOUR: CURRICULUM DESIGN

Curriculum Organization

The curriculum is composed of a single instructional unit which includes six lessons. The unit is designed to increase the reading comprehension ability of students as they utilize tools in joint, mediated activity. The text for the unit is *And Then What Happened, Paul Revere?* by Jean Fritz (1971). This book is a supplementary text to develop concepts about American history in the fifth grade social studies strand.

All lessons can be implemented in one of two ways. Students familiar with collaborative group work and strategy implementation can work independently of the teacher. On the other hand, students who are just beginning to learn how to utilize these techniques in a collaborative activity setting should work in a teacher-guided group to receive appropriate scaffolding. It is the teacher's decision, based on knowledge of the students' abilities and skills, to choose who will be in the community of each collaborative group.

Activity Setting

This unit is specifically designed to incorporate social learning into the process of reading comprehension

development. Each lesson takes place in a group activity setting where students work collaboratively on specific tasks aimed at increasing their awareness of the reading comprehension process.

Table 4.1 shows the components of the Activity System Model (see Figure 3.1) and the correlation of the sub-components and (in which lessons these are integrated) This serves as an overview of the theoretical basis of the project and its integration into actual lessons.

At least one aspect of each lesson is designed to allow students to practice strategic reading comprehension techniques in a group setting. Psychological tools play a major role in each lesson. These include cognitive, metacognitive, and affective strategies, as well as other reading strategies.

Components of the Unit

The lessons will be divided among the three stages of reading: pre-reading, during-reading, and post-reading. Appropriate strategies have been selected based on the specific purpose of each lesson and the nature of the text. Each lesson has a description of the components, task chains, appropriate focus sheets and work sheets, and an assessment (see Chapter Five). The subject and community

Table 4.1. Integration of activity system model components and sub-components into unit plan

Component	Sub-component	Lesson
Subject	Individual Student	1-6
Community	Members of Group: 4 students	1-6
Instruments	Psychological Tools <ul style="list-style-type: none"> • Text-<i>And Then What Happened, Paul Revere?</i> 2-6 • Oral language 1-6 • Written language 1,2,3,5,6 • Strategies; Pre-reading: <ul style="list-style-type: none"> discussion 1,2 prior knowledge 1,2 new vocabulary 2 predicting 1 brainstorming 1 inferencing 2 using contextual clues 1,2 reflecting 2 critical thinking 1 • Strategies; During-reading: <ul style="list-style-type: none"> summarizing 3 clarifying 3 predicting 3 questioning 3 critical thinking 3 informing 3 synthesizing 3 • Strategies; Post-reading <ul style="list-style-type: none"> instructional conversation 6 summarizing 4,5,6 clarifying 4,5,6 sequencing 4,5 retelling 4,5 memory 4,5,6 analysis 6 critical thinking 6 problem solving 6 justify and persuade 6 synthesizing 6 questioning 4,5,6 Technical Tools <ul style="list-style-type: none"> • pencil 1-6 • paper 	
Rules	School Rules <ul style="list-style-type: none"> • Attendance • Punctuality • Comportment 	1-6

	Rules continued Classroom Rules <ul style="list-style-type: none"> • All students must do their best at all times • Be respectful toward others Group Rules <ul style="list-style-type: none"> • Must have a role and be responsible for those duties • Support others • Display a positive attitude • Help others when possible or asked • Participate in discussions • Ask questions if you don't understand • Share materials and ideas • Use polite language • Speak in a small group voice-loud enough for only your group to hear you • Complete all group and individual work 	1-6 1-6
Division of Labor	Leader Recorder Taskmaster Reporter Investigator Summarizer Clarifier Questioner Reteller Checker Discussion Participant	1,2,5,6 1,2,5 1,2,3,5 1,2,5 2 3 3 3 4 4 6
Object	Activate prior knowledge Make predictions about story content Understand new words based on context clues Strategically read text Summarize story through free retelling and cueing Sequence story events Draw conclusions Develop speaking and listening skills through discussion	1 1,3 2 3 4 5 6 6
Outcome	Reading comprehension development measured and monitored through assessments	1-6

in each lesson is the same, whereas the remainder of the activity components will be described in each lesson. The same applies to school and class rules (see Table 4.1), however, group rules may vary according to lesson.

Assumptions

This unit assumes the teacher has prepared the students to participate in a collaborative activity setting to work either independently or under the teacher's direct guidance. The lessons are not designed to foster initial team-building and social skills; rather, they are geared toward the students' learning how to appropriate strategies in a group activity which are applicable to reading comprehension development.

CHAPTER FIVE: ASSESSMENT

Vygotsky and Assessment

Due to the static nature of IQ testing during his time, Vygotsky developed the ZPD as a response to testing which he considered limiting (1986). As previously discussed, Vygotsky argued that a student can exceed an individual level of competence only while working on a challenging mental task with the collaboration of a teacher or peers. When measuring student performance from a Vygotskian perspective, it is important to evaluate the difficulty of the task at hand, as well as the social context where the assisted performance takes place. With this in mind, the assessment of this unit includes these two areas for evaluation. In addition, student self-reflection has also been featured.

Assessing Collaborative Activities

Because the unit plan is designed upon the basis of a collaborative activity setting, it is important to realize the assessment cannot be static in nature; rather, it must be dynamic. Dynamic assessment permits and even encourages teachers to instruct while evaluating; there is no separation, no isolation of the assessment data apart from the lesson activity. Although each cooperative group

follows the same general guidelines and utilizes the same tools, the dialogue and conclusions each group reaches may vary to some extent. The unit has two distinct goals: one is to increase reading comprehension, and the other is to develop the learners' process of understanding how to improve reading comprehension, therefore both must be assessed.

The students themselves are required to self-assess this learning process, and the nature and success of working collaboratively toward a common goal. Some of the strategies are deliberately taught to students so they can use them metacognitively to evaluate their understanding. (There is no particular score or grade for this type of knowledge, merely that such a strategy is successfully implemented.) (In several lessons students are required to complete a reflective work sheet in which they consider the usefulness and ease of the strategies they used.)

The teacher's role in the assessment of this unit plan is twofold. First, the teacher must closely observe the interactions of the students and evaluate if they are comprehending the strategies they are implementing. Several of the lessons include rubrics for the teacher to fill out based on these observations. Second, through

these observations, the teacher must be aware if the students are not successfully implementing the desired strategies. If this is the case, the teacher must make an alteration in the lesson design.

(Assessing collaborative activities requires not only a measure of the learned outcome, but also careful observations by the teacher and reflection by the students upon the learning process.) The nature of the cooperative learning method requires that ongoing adjustments be made by both students and teacher to maximize the learning potential of such an activity. (Without implementing a dynamic assessment model, the usefulness of collaborative activity settings cannot be realized.)

Using dynamic assessment to evaluate the success of activities leads to a greater understanding of a student's ability while working in the ZPD. Measuring the potential level of a student's learning ability while work is performed in mediated, joint activity, leads to an understanding of both individual and group success in a classroom. This success further supports the validity of applying Vygotskian principles in education.

The sample unit included in this project as an exemplar of mediated learning is a first attempt to use the

adapted Engeström model as a guide for curriculum planning. As such, it is a unique and timely application of Vygotskian theory to the elementary classroom. As is evident, the model is particularly well adapted to the mediation of reading instruction. In an era of unprecedented pressure on ESL teachers to improve reading scores, this model has the potential to make a deep and lasting contribution to ESL teaching.

APPENDIX A

UNIT OVERVIEW: *AND THEN WHAT HAPPENED, PAUL REVERE?**

Lesson One: What Do We Already Know about Paul Revere

Lesson Two: Vocabulary Development

Lesson Three: Reading with Understanding

Lesson Four: Cued Retelling

Lesson Five: Chain of Events

Lesson Six: Instructional Conversation

*Fritz, J. (1996). And then what happened, Paul Revere?
NY, New York: G.P. Putnam's Sons.

Lesson One: What Do We Already Know About Paul Revere?

Component	Implementation
Object	Activate prior knowledge about Paul Revere and his historical period, Predict the content of the story
Division of Labor	Leader Recorder Taskmaster Reporter
Group Rules	Must have a role: <ul style="list-style-type: none"> • Leader: initiates discussion • Recorder: writes group responses onto Work Sheet 1.1 • Taskmaster: makes sure group is working toward object • Reporter: announces information to class Group must complete Work Sheet 1.1 Individuals must complete Work Sheet 1.2 See Table 4.1 for general group rules
Instruments	Discussion Brainstorming Prior Knowledge Predicting Critical Thinking Reflecting Work Sheets 1.1 and 1.2 Pencil
Task Chain 1.1	Leader explains task to the group Group discusses questions on Work Sheet 1.1 Recorder writes information Leader initiates discussion about predictions Recorder writes predictions including the initials of the group member who made the suggestion
Task Chain 1.2	Teacher elicits responses from Reporters of each group Background information is discussed and clarified by Teacher Groups can add or alter their predictions
Task Chain 1.3	Students individually fill out Work Sheet 1.2
Outcome	Group completion of Work Sheet 1.1 (What Do We Already Know About Paul Revere?) Individual completion of Work Sheet 1.2 (Group Reflection) Assessment Sheet 1.1 (Group Assessment)

Work Sheet 1.1

What Do We Already Know About Paul Revere?

Write the answers to the following questions. Use the back of the paper if you need more room.

Who was Paul Revere?

Why is he famous?

From what time in history was he alive, and where?

What else do we know? Let's brainstorm our ideas:

Write your predictions and put the initials of the group member who gave the idea.

Our Predictions for And Then What Happened, Paul Revere?

Work Sheet 1.2

Group Reflection

Fill out the chart by yourself.

Name	
Name of group members	
Group goal	
My role today	
How well did I get along with others? (1-not well, 5-very well) Why?	1 2 3 4 5
How much did I contribute to the group reaching its goal? (1-not much, 5-very much) Why?	1 2 3 4 5
How can the group work better together?	
What strategies did we use?	
How were they useful?	

Assessment Sheet 1.1

Group Assessment

Teacher fills out assessment for each group. Scoring is from 1-5; 1 = low proficiency, 5 = high proficiency. Write any necessary comments to clarify score.

Names of Group Members				
Cooperation				
Attitude				
Assistance/ Helpfulness				
Contribution to group goal				
Success in assigned role				
Utilizing strategies				
Task completion				
Use of language (polite/impolite)				
Comments				

Lesson Two: Vocabulary Development

Component	Implementation
Object	Understand new words from contextual clues
Division of Labor	Leader Investigator Taskmaster Reporter
Group Rules	Must have a role: <ul style="list-style-type: none"> • Leader: initiates discussion • Investigator: seeks outside sources of information if necessary • Taskmaster: makes sure group is working toward object • Reporter: announces information to class Must complete Work Sheet 2.1 and 2.2 individually See Table 4.1 for general group rules.
Instruments	Discussion Incorporating prior knowledge of semantic, syntactic information Using contextual clues Critical thinking Work Sheet 2.1 and 2.2 Dictionary Pencil
Task Chain 2.1	Leader explains task to the group Group reads first sentence and discusses possible meaning of underlined words When agreement is reached, a definition is written on Work Sheet 2.1 If agreement cannot be reached after members have argued their point, the Investigator seeks a dictionary answer
Task Chain 2.2	Teacher elicits responses from Reporters of each group, Definitions of words are validated
Task Chain 2.3	Students individually fill out Work Sheet 2.2
Outcome	Individual completion of Work Sheet 2.1 (What Does It Mean?) Assessment Sheet 2.1 (Group Assessment)

Work Sheet 2.1

What Does It Mean? **Using Context Clues**

Read each sentence and write what you think the underlined word means. All words are taken directly from the story *And Then What Happened, Paul Revere?* by Jean Fritz.

1. As a patriot, Paul Revere took many risks to support the freedom of the colonists.
2. He made beads, rings, locketts, bracelets, buttons, medals, pitchers, teapots, spoons, sugar baskets, cups, ewers, porringers, shoe buckles, and candlesticks.
3. There were so many dogs that a law was passed prohibiting people from having dogs that were more than 10 inches high.
4. Street vendors were constantly crying their wares-everything from fever pills to hair oil to oysters.
5. When he was fifteen years old, Paul took over his father's job as a silversmith.
6. First there was a tax on printed matter-newspapers, diplomas, marriage licenses.

7. He prepared for it by smearing his face with red paint and lampblack.
8. He got past the sentries, got through the snow, kept his horse on the road, and kept himself on his horse.
9. She stepped out of the flannel petticoat she was wearing and threw it out the window.
10. French soldiers, along with Indians, were attacking the borders of the colonies.
11. The false teeth he whittled out of hippopotamus tusk looked just fine.
12. Then there were two guns, then a succession of guns firing back and forth.
13. Later he set up a foundry and made stoves, anvils, forge hammers, bolts, cogs, braces and pumps.

Assessment Sheet 2.1

Group Assessment

Teacher fills out assessment for each group. Scoring is from 1-5; 1 = low proficiency, 5 = high proficiency. Write any necessary comments to clarify score.

Names of Group Members				
Cooperation				
Attitude				
Assistance/ Helpfulness				
Contribution to group goal				
Success in assigned role				
Utilizing strategies				
Task completion				
Use of language (polite/impolite)				
Comments				

Lesson Three: Reading With Understanding

Component	Implementation
Object	Strategically Read Text
Division of Labor	Summarizer Clarifier Taskmaster Questioner
Group Rules	<p>Must have a role:</p> <ul style="list-style-type: none"> • Summarizer: paraphrases story • Clarifier: assists group in understanding confusing areas such as vocabulary, plot etc., leads discussion to answer questions • Taskmaster: makes sure group is working toward object and members are making entries into Learning Log • Questioner: after discussion, Questioner asks all members what their predictions for the next part of the story are <p>Group reads story silently If a member finishes early he/she can write in Learning Log During silent reading members should make notations in their Learning Log During discussion all members must contribute Must complete Work Sheet 3.1 individually Must make entries into Learning Log See Table 4.1 for general group rules</p>
Instruments	<p>Discussion Summarizing Clarifying Predicting Critical thinking Informing Synthesizing Note taking and Reflecting Focus Sheet 3.1, Work Sheets 3.1 and 3.2, Text and Pencil.</p>
Task Chain 3.1	<p>Summarizer explains task to the group, Group reads pages 5-18 <i>silently</i> making notations in Learning Log (Work Sheet 3.1) Once all members have finished reading, the Summarizer Paraphrases the reading Clarifier leads discussion about questions Questioner elicits answers about predictions for Upcoming reading Repeat procedure for pages 19-35 Repeat again to finish the book</p>
Task Chain 3.2	Students individually fill out Work Sheet 3.2 (Group Reflection for Reading with Understanding)
Outcome	<p>Individual completion of Work Sheet 3.1 (Learning Log) Individual completion of Work Sheet 3.2 (Reflection) Assessment Sheet 3.1 (Group Assessment)</p>

Focus Sheet 3.1

Strategy Sheet: How to ask Good Questions and Do Your Job*

Summarizer: Briefly tell the most important parts of the story

This story is about...

It takes place in...,

During...,

who,

what,

when,

where,

how,

why

Clarifier: Help your group understand the story and the words

Does everyone agree with the summary?

Are there any other important parts of the story?

Are there any parts of the story that don't make sense?

Are there any words that don't make sense?

Does anyone have any idea what that means?

What do you think about that part?

Did you write any questions in your Learning Log?

Questioner: Ask group to predict what will happen

What do you think will happen in the next part of the story?
(be sure all members of your group give an answer)

Taskmaster: Keep all group members doing their jobs

It is important for us to do our job
Let's get back to doing our job

If you get stuck while reading:

- re-read the paragraph
- if it's a word, look for clues in the sentence (context clues)
- if that doesn't help, read the sentence before and after
- if you don't know how to pronounce the word, write it in your Learning Log and during discussion ask your group

***Don't forget, when you read by yourself you do all the jobs.**

Work Sheet 3.1

Learning Log for And Then What Happened, Paul Revere?

If you have any questions or comments during reading, write it down, note the page number and write your question or comment in the column.

Part of story and page number	Question or comment

Work Sheet 3.2

Group Reflection for Reading with Understanding

Fill out the chart by yourself.

Name					
Name of group members					
My role today					
Did you use the Learning Log 1=a little bit, 5= a lot	1	2	3	4	5
How helpful were the strategies in understanding the story? 1=not helpful, 5=very helpful					
• summarizing	1	2	3	4	5
• clarifying	1	2	3	4	5
• discussing	1	2	3	4	5
• predicting	1	2	3	4	5
Did you understand how to use the strategies?	1	2	3	4	5
What strategy helped you to understand the story the most?					
How can the group work better together?					

Assessment Sheet 3.1

Group Assessment

Teacher fills out assessment for each group. Scoring is from 1-5; 1 = low proficiency, 5 = high proficiency. Write any necessary comments to clarify score.

Names of Group Members				
Cooperation				
Attitude				
Assistance/ Helpfulness				
Contribution to group goal				
Success in assigned role				
Utilizing strategies				
Task completion				
Use of language (polite/impolite)				
Comments				

Lesson Four: Cued Retelling

Component	Implementation
Object	Orally summarize story using cues if necessary
Division of Labor	Reteller-2 Checker-2
Group Rules	<p>Must have a role:</p> <ul style="list-style-type: none"> • Reteller: retells story • Checker: checks off cue list as partner retells the story <p>Must complete Work Sheet 3.1 individually Listen attentively to partner See Table 4.1 for general group rules</p>
Instruments	<p>Discussion Summarizing Recalling Sequencing Retelling Reflecting Work Sheets 4.1 and Work Sheet 4.2</p>
Task Chain 4.1	<p>One Reteller and one Checker work together As the Reteller summarizes the story, the Checker marks the left column of the Cue Sheet (free retelling column) as the partner mentions that part of the story</p>
Task Chain 4.2	<p>After Reteller finishes, Checker uses the Cue Sheet to remind Reteller of missing parts of the story (if any) and through these prompts, Reteller should complete the summary. The roles are reversed and the procedure is repeated.</p>
Outcome	Assessment: Completed and initialed Work Sheet 4.1 (Cued Retelling) for each student.

Work Sheet 4.1

Cued Retelling for *And Then What Happened, Paul Revere?*

Checker reads the instructions in quotes to the Reteller: **"Tell me everything you can about the story we just read."** Checker: as your partner talks about the ideas, mark a check in the *free retelling* column. After your partner finishes, **"Now you may use the following cues as I mention them to help you remember additional things about the story. Tell as much as you can about each cue."** Mention one cue at a time to your partner.

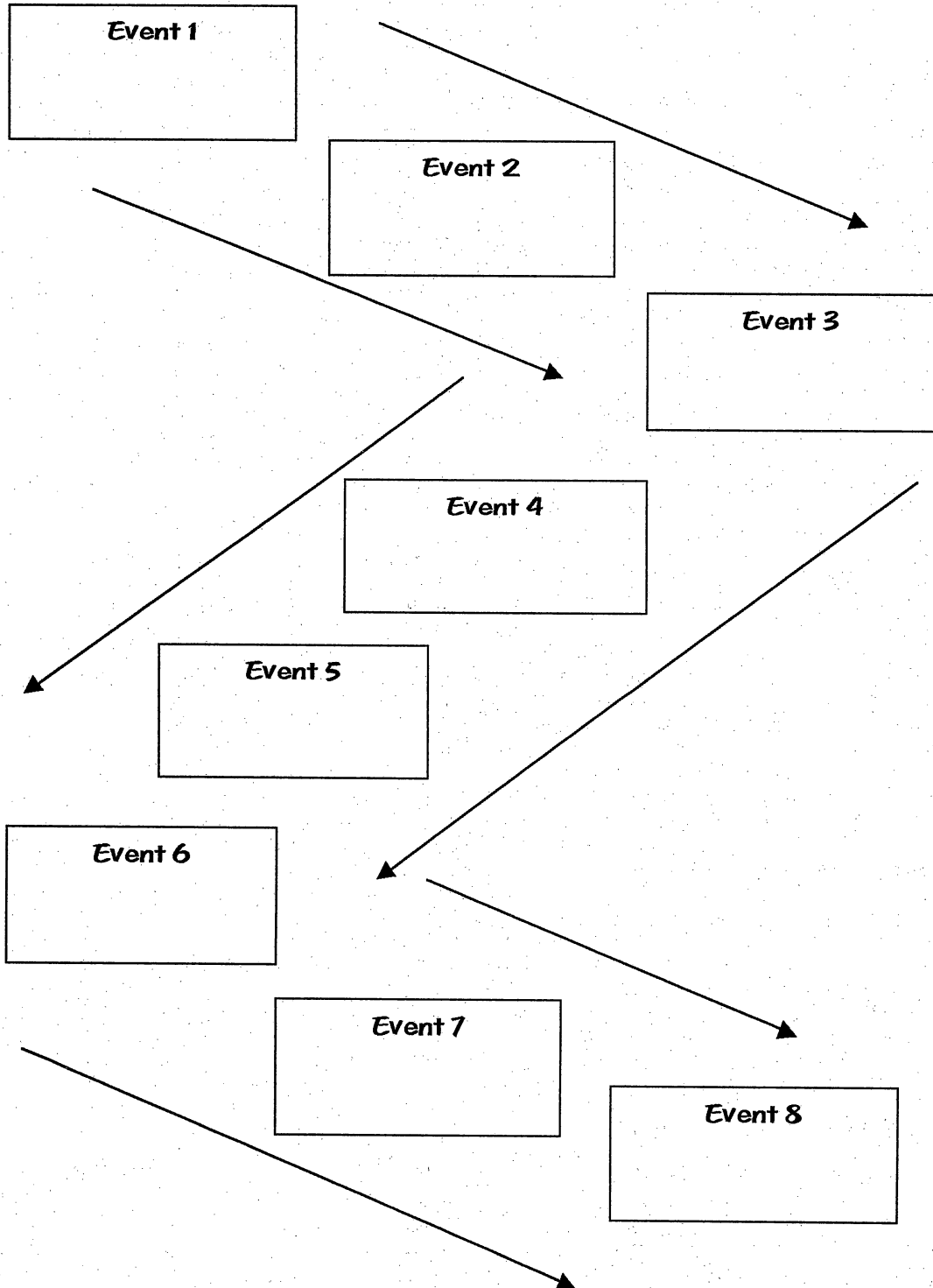
Free retelling	Cued retelling
	born in Boston
	became a silversmith
	went to participate in war with the French and Indians
	got married and had lots of kids
	colonists were heavily taxed by the English
	Boston Tea Party-Sons of Liberty
	became messenger and secret agent
	special job was to warn citizens about the English who were going to start a war
	one if by land, two if by sea
	rowed across the river and snuck past the English ship
	stopped by English officers, but got away
	Paul got to Lexington, John Hancock forgot his trunk so they went back
	The English came at dawn, and the first gun shot was fired starting the Revolutionary War

Lesson Five: Chain of Events

Component	Implementation
Object	Sequence the key events in the story
Division of Labor	Leader Recorder Taskmaster Reporter
Group Rules	<p>Must have a role:</p> <ul style="list-style-type: none"> • Leader: initiates activity and keeps discussion going • Recorder: writes group information on Work Sheet 5.1 • Taskmaster: makes sure group is working toward object • Reporter: after completing chain of events reports to class <p>During discussion all members must contribute Group must complete Work Sheet 5.1 See Table 4.1 for general group rules</p>
Instruments	<p>Discussion Sequencing Summarizing Clarifying Reflecting Work Sheets 5.1 and 5.2 Text</p>
Task Chain 5.1	<p>Leader begins discussion about chain of events Recorder makes notes on scratch paper After all the events are jotted down, group reviews and clarifies information If there is a disagreement a vote is taken Final answers are written on Work Sheet 5.1 (Chain of Events)</p>
Task Chain 5.2	Students individually fill out Work Sheet 5.2 (Reflection)
Outcome	Assessment: Group completion of Work Sheet 5.1 (Chain of Events)

Work Sheet 5.1

Chain of Events for *And Then What Happened Paul Revere?*



Lesson Six: Instructional Conversation

Component	Implementation
Object	Draw conclusions Build speaking and listening skills
Division of Labor	Leader Discussion participants-3
Group Rules	<p>Must have a role:</p> <ul style="list-style-type: none"> • Leader: a challenging role requiring initiation of topic, summarizing, clarifying, and discussion guide. Leader does not dominate discussion, rather facilitates and draws conversation out of other participants while developing ideas and themes presented by group members • Discussion participant: contributes opinions and points of view within conversation <p>Must complete Work Sheet 6.1 and 6.2 individually See Table 4.1 for general group rules *This is a challenging strategy and needs considerable teacher mediation before students can use independently</p>
Instruments	<p>Discussion Summarizing Clarifying Analysis Memory Problem solving Justify and persuade Synthesizing Reflecting Focus Sheet 6.1 and 6.2 Work Sheet 6.1 and 6.2 Pencil</p>
Task Chain 6.1	<p>Leader asks group to read prompt After all members are finished Leader summarizes prompt asks if anyone needs clarification Leader opens conversation with a question (see Focus Sheet 6.1) Participants state opinions, ideas Leader guides and develops conversation Once possibilities are exhausted, Leader summarizes group responses and closes conversation</p>
Task Chain 6.2	<p>Students individually fill out Work Sheet 6.1 (Idea Web) Students individually fill out Work Sheet 6.2 (Writing) Students individually fill out Work Sheet 6.3 (Reflection)</p>
Outcome	<p>Assessment: Individual completion of Work Sheet 6.1 (Idea Web) Individual completion of Work Sheet 6.2 (Writing) should include well-developed ideas/mechanics (score 1-5) Assessment Sheet 6.1 (Instructional Conversation Observation)</p>

**Instructional Conversation:
*And Then What Happened, Paul Revere?***

Guidelines for Leading an Instructional Conversation

Beginning

- Remind everyone they don't need permission to speak, if they have something to say then they should say it
- Retell the discussion prompt in your own words
- Ask the group if they need clarification of any part of the prompt
- Invite someone to respond to the prompt

During

- You can take turns just like everyone else, but don't dominate
- Restate ideas every so often or if they don't make sense
- If someone gets too far off the topic then bring the conversation back to what the prompt is about
- Try not to do all the talking

Ending

- Continue your discussion until time is up
- At the end, restate the main ideas that the group discussed
- Thank everyone for participating in the discussion

Guidelines for Contributing to the Discussion:

You should say your ideas and opinions during the conversation. Use polite language while discussing.

If you want to say something here are some sentence starters:

- I think....
- I agree/I disagree
- I'd like to add to whatsaid
- I think that is a good idea, but....
- Here is a different idea....
- Remember whatsaid a little while ago....
- My opinion is the same/different/a little different
- What do you think about....
- Do you think....

Here is some language that is not polite, so don't use it:

- That's a dumb idea (instead say "I have a different idea")
- You are wrong (instead say "I disagree with that")

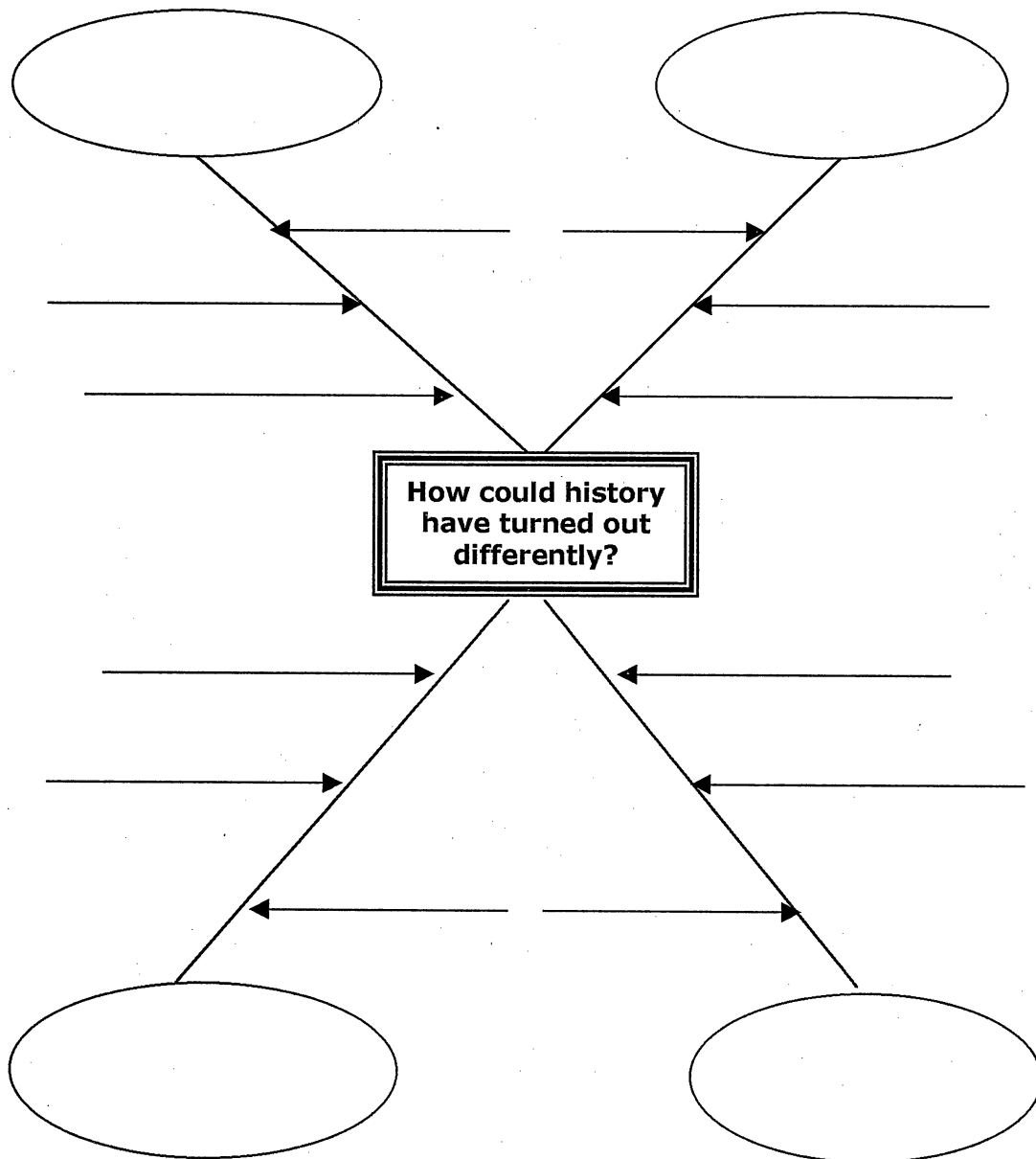
Story Prompt for Instructional Conversation
And Then What Happened, Paul Revere?

What if England had treated the American colonists fairly; had not taxed them as highly and given them more rights? How may it have affected American history? What might have happened if Paul Revere was caught before he raised the lanterns, or if he never made it back to Lexington? In what other ways could American history have turned out differently if just a single event or two were different or never happened in the first place? How would your life be different?

Work Sheet 6.1

Idea Web

Think of how history may have turned out differently. Remember the Instructional Conversation you had with your group. Write the main ideas in the big circles and the supporting ideas on the lines.



Work Sheet 6.2

Writing: How Could American History Have Turned Out Differently?

Write an essay. Use the back of the paper if you need more room.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Score: 1 = low proficiency, 5 = high proficiency.

	1	2	3	4	5
Content-contains well developed ideas					

Mechanics-contains good use of grammar/spelling 1 2 3 4 5

Work Sheet 6.2

Reflection on the Instructional Conversation

Circle the number: 1 = low, 5 = high, or fill in an answer.

Did the Instructional Conversation help me understand new ideas?	1 2 3 4 5
How much did I like this strategy?	1 2 3 4 5
How much did I contribute to the conversation?	1 2 3 4 5
In what ways was it good?	
In what ways can it improve?	
How did I do a good job?	
How can I improve using this strategy?	

Assessment Sheet 6.1

Instructional Conversation Observation

For each category give a score: 1 = low proficiency, 5 = high proficiency.

Procedure <ul style="list-style-type: none"> • Leader summarized prompt • Leader asked for clarification • Leader invited discussion • Leader summarized main ideas during discussion • Leader brought discussion back to the main idea • Leader summarized main ideas before closing discussion 	<div>12345</div> <div>12345</div> <div>12345</div> <div>12345</div> <div>12345</div> <div>12345</div>
Discussion <ul style="list-style-type: none"> • all members added their ideas to the discussion • polite language was used • themes were developed • the discussion was based on the prompt • the conversation was not dominated by one person 	<div>12345</div> <div>12345</div> <div>12345</div> <div>12345</div> <div>12345</div>

Comments:

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