Specifications:

Investigating World History—A Systems Approach

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Main objective:

Develop learners' abilities to make sense of complex reality.

Subsidiary enabling objectives:

- 1. Enhancing learners' abilities to use the full range of cognitive skills, i.e. inferring, hypothesizing, categorizing, comparing, contrasting, correlating, describing, abstracting, recalling, extrapolating, applying, predicting, sequencing, relating, integrating, synthesizing, generalizing, interpreting, translating, empathizing, valuing, visioning, imagining, intuiting.
- 2. Developing learners' understanding of systems—their components, interactions, environments, and driving forces, especially those in which humans are the actors, shared ideas motivate their actions and shape their culture, and important social and historical changes result from internal and external influences.

Overview:

Investigating World History demonstrates how the objectives listed above can generate a paradigm shift in approaches to crucial learning. The course is focused on development of a logical sequence of powerful explanatory concepts that collectively explore the crucial relationships that shape human societies, past, present and future.

Conventional expository narrative is not a significant part of the course materials; instead, learner activity is focused on analysis and interpretation of historical primary sources. As learners progress through the materials, each newly-introduced conceptual element is applied to historical data, then (in "Follow-Up" activities) to present-day situations. These "here and now" activities are an important element in gaining learner understanding and acceptance of the importance of the skills and concepts they're learning, because they apply these mental tools to situations directly affecting their lives.

The full range of thinking skills (see list above) cannot be elicited with conventional textbook narrative, because the textbook author pre-processes the information and supplies conclusions to be remembered, short-circuiting deep thought by learners. Simply telling learners what they should learn is ineffective. To develop high-order thinking skills, learners must be given resources that require them to use those skills. In the study of history, primary sources (along with good analytical questions) provide the raw material for in-depth thought.

Links (All materials are provided at no cost. See copyright notice):

http://www.marionbrady.com/WorldHistory.asp

Contents—Scope and Sequence (Separate .pdf files are supplied for each component):

o: Overview for Teachers and Mentors

Rationale and instructions for using *Investigating World History*. A discussion of active learning and its benefits, primary sources and complex cognitive processes, and the use of a general systems-based model to guide investigation of reality, past and present. Note that each unit also has, at the end, notes for teachers or mentors specific for that unit.

1: Paleoanthropology/Analyzing Evidence

An introduction to **active learning**, which gives learners significant puzzles and problems to solve and projects to complete. Active learning is far more likely to result in intense learning than traditional passive "read and remember" teaching. This entire course focuses on active learning. Once they are familiar with the process, learners generally find it much more satisfying than conventional classwork.

Primary data used here: Photographs and other data from two caves in northern Spain, one occupied during the Neolithic period by ice-age hunter/gatherers, another (quite near the first) with paintings of animals on walls. Learners infer how the people obtained the necessities for living, and possible purposes of objects and images they created.

2: Agriculture and the City/Organizing Knowledge

A focus on **organizing knowledge**, introducing hierarchical "trees" as organizing tools. Learners are inundated with information beyond their ability to cope. One key to gaining control of this flood of information is learning to develop "knowledge trees"—hierarchical arrangements of information based on subsumption. Beginning with powerful main categories, then identifying sub-categories, sub-sub-categories, etc. is essential to the whole process of making sense of complex reality.

The vehicle for skill development is analysis of data from archaeological site "Çatalhöyük," in present-day Turkey. Learners identify and classify the many kinds of specialized work performed in the community, including those related to early agriculture.

A simple systems model with five main parts is used to guide inquiry from this point forward. It's main function is to organize understanding, and to generate questions to be investigated to reveal system characteristics and changes.

3: Muddy Rivers/Model Category: Setting

This unit introduces the first of the organizing categories in our Model: "**Setting**." This category of the Model encompasses both the primary habitat or natural environment and its resources, and the secondary, human-made setting, ranging from tools to cities. Human activity both shapes and is shaped by all aspects of setting.

A scientific description of six climate zones created by latitude and global air circulation is given, and learners hypothesize about their effects on rivers passing from zone to zone. They test their hypotheses by analyzing Herodotus' descriptions and other data for Mesopotamia and Egypt.

4: Mesopotamia/Model Category: Patterns of Action

The focus in this unit is on the second organizing category in our Model, "**Patterns of Action**." Every society generates standardized ways of solving its main problems, and these action patterns form major subsystems—political, economic, educational, religious, family, etc. These patterns resist change, but still evolve under the influence of other changes.

Primary sources from early civilization in Mesopotamia are analyzed to identify action patterns related to work, the economy, religion, farming practices, and other aspects of life in the region. Relationships between setting and action patterns are also investigated.

5. Ancient Egypt/Model Category: Demographics

This unit introduces the third Model category: "**Demographics.**" Understanding any society and its historical changes required investigation of its population size, distribution, and composition, including sub-groups, and the changes that are occuring in each of these elements.

Using ancient Egypt as the vehicle, relationships between demographics and the Model categories previously introduced are investigated in some depth, and learners analyze investment of capital by authorities.

6. Ancient Israelites/Model Category: Shared Ideas

The fourth Model category, "**Shared Ideas**," is central to the analysis of the primary data in this unit. Shared ideas, values, and beliefs are the motives that collectively "explain" much of what humans are doing. Understanding these shared ideas is the single best key to making sense of any society. As with action patterns, a group's shared ideas tend to persist for long periods, resisting change until they no longer "fit" the group's reality.

The Israelites are seen by scholars as originating the linear view of time. Other important shared ideas in the *Tanakh*—the Hebrew Scriptures—are inferred by learners. The final section traces the effects of the Babylonian exile on Jewish worldview (shared ideas).

7. Early India/Applying the Model

This unit and the next introduce no new analytical concepts, but provide opportunity for learners to apply the four main parts of the Model to new societies. Hence, the units may be used as evaluation instruments to determine learners' levels of understanding of the processes and concepts used to this point in the course of study.

8. Early China/Applying the Model

This unit explores relationships between setting and shared ideas, and conflicts between Confucian and Legalist ideologies in China in the 4th through the 2nd century BCE. As with the "Early India" unit, this unit may be used for evaluation of learners' analytical skills.

9. The Persian Empire/Systemic Relationships

The overarching Model component "**Systemic Relationships**" is introduced here. This fifth and final major Model category ties each of the other parts together, and is generally indicated by change over time. Because we're dealing with systems, a change in any part is sure to cause changes elsewhere. Developing the learner's ability to discover these systemic relationships is the final key to improving historical understanding.

A repeated pattern of conquest by nomads on horses is the historical focus. Learners generate simple block-and-arrow diagrams to show interrelationships between patterns of action within nomadic life and shared ideas and patterns of action contributing to successful warfare.

Y2. Phoenicians/Applying the Model

Active learning, with its focus on investigation, tends to go more slowly than conventional passive, narrative textbook-based classwork. Some teachers/mentors may choose to spread the world history course over two years' study. This optional unit may be used as a second-year introduction, inserted prior to any unit after 6. It introduces/re-introduces the Model, and learners apply it to Phoenician/Canaanite Civilization.

10. Sparta/System Action Patterns: Socialization

Of all the shared patterns of action within a society, probably the most important are those associated with "**socialization**"—shaping the young to perpetuate and transmit the society's important ideas, values and individual attributes. The systemic effects of socialization can best be seen in a society that differs from the learners' own, and Sparta is startlingly different.

11. Athens/System Action Patterns: Making Decisions

Other shared patterns of action of great systemic importance are those related to making and carrying out major decisions for the society. **Decision-making patterns**—the political subsystem—are the focus of this unit. Learners investigate the development of democracy in Athens, and evaluate its effects.

12. Early Rome/System Change: Autonomy

This unit explores **autonomy** and the historically-significant reactions that occur when it is thwarted. Frustration and stress grows when many people feel they lack adequte control over their own fate. This is often caused by domination by another group, by adverse economic conditions, or by other forms of disfunction. Inadequate autonomy leads to a variety of reactions, including group formation, opinion appeals, strikes, boycotts, violence, and other responses. Early in the 5th century BCE conflict between patricians and plebeians began in Rome over the issue of debt slavery, a clear instance of thwarted autonomy.

13. Hellenistic Period/Systemic Relationships

This unit explores **systemic relationships** that characterize dominant Greek culture related to Alexander the Great and the period that followed his death.

14. Roman Culture Change/Cumulative Causation

Cumulative causation is a major systemic driver of historical change. In complex systems, significant changes have multiple causes and multiple effects. Additionally, changes can feed back and reinforce transition, or, conversely, stabilize the system and inhibit further changes. These elements of system change are particularly important in generating economic cycles, but are evident whenever societal change is occurring.

This unit analyzes profound second century BCE and third century CE changes in the Roman Empire.

15: Two Religions/Stress, Religion, and Culture Change

The religious action patterns and shared ideas in the Roman Empire changed radically with the development and growth of Christianity. This unit investigates **systemic relationships** associated with the changes.

16: Medieval Society/Systemic Historical Change

In this unit learners **create their own questions** and use them to investigate the **causes and consequences of systemic changes** associated with the evolution of medieval society.

17: Medieval Monastic Life/Boundary Maintenance

Every society and subgroup carefully distinguishes between "**insiders**" and "**outsiders**." These groups set up and maintain mental, behavioral, and often physical **boundaries** to separate the two. Medieval monasteries vividly demonstrate these principles.

18. Islam's Rise/Rapid Historical Change

Beginning early in the seventh century in Arabia, Islam quickly spread across southern Asia, northern Africa, then into Iberia. This unit examines **rapid system change, its historical causes and consequences**.

19: Yuan Dynasty China/Problem-Solving Subsystems

Civilization-building systems that benefit the public, and their relationships to government, are investigated here, using Marco Polo's descriptions of Chinese Cities in the late 13th century.

20: Aztec-Spanish Conflict/Cultural Difference

When dissimilar societies meet, differences may lead to conflict. Learners analyze a variety of confrontations to identify **aroused emotions and the underlying differences in ideas and action patterns.**

Feedback: Classroom teachers, working together, are better positioned to improve instructional materials than are policymakers and publishers. To facilitate dialogue and continuous refinement, we invite participation in an interactive, supportive, on-line community to discuss learner reactions, suggest improvements to existing activities, and suggest additional or alternative activities. The website (<u>http://www.marionbrady.com/AHH.asp</u>) provides a simple way for users to comment on any aspect of the program.