Scope and Sequence: *Connections: Investigating Reality*

CIR was developed for two reasons: (a) to fill an important gap in the education of virtually all learners, and (b) to serve as a paradigm exemplifying optimum process and content for every course at every level. We believe that education must be radically re-invented, and *CIR* is our version of how it could be done.

<div align="center">Marion Brady   Howard Brady</div>

Fundamental organizing principles:

A. The most significant objective of formal education: Making sense of reality.
B. Reality can only be understood by identifying the systemic relationships that link parts of reality together. An understanding of SYSTEMS is central to learning.
C. Organizing what is learned is essential to using that information effectively. Students need a mental map or model for systems, with universal main categories applicable to all knowledge.
D. Most of the important skills students need to make sense of reality can only be learned by actively investigating many aspects of reality for themselves. For aspects of reality that are inaccessible in time or space, active learning proceeds based on primary sources. (Textbooks, much information on the Internet, and other pre-processed, secondary sources restrict possibilities for higher-order cognitive processing by learners.)
E. An important part of this reality-based learning process is effectively communicating what is learned to others, and understanding communication generated by others. This communication includes written and oral words, and also many kinds of images.

Learner's investigations within *CIR* develop this stepped sequence of concepts and ideas:

1. Learning from reality requires several thought processes more complex than passively remembering what is read, heard or seen. Using these other, more complex thought processes requires the learner's active participation. Thus, using *CIR* will be unlike much conventional school work.
2. Understanding reality begins by finding PATTERNS and RELATIONSHIPS in whatever aspect of reality is being investigated.
3. Some relationships are more important than others, forming relationship hierarchies.
4. SYSTEMS are the most significant grouping of relationships. They exist in myriad forms. The only way to make sense of complex reality is to identify and analyze the relevant systems it contains.
5. In analyzing any system, five analytical categories are major. The first four are: (a) system components and their configuration, (b) systemic patterns of interaction between components, (c) system driving forces, and (d) system environment. The fifth, vastly important category: (e) relationships between (a) thru (d), as indicated by changes across time.
6. Each of the first four basic analytical categories may be expanded hierarchically, with sub-categories, sub-sub-categories, etc. Expanding and elaborating the categories is important to growth in understanding.

7. The fifth analytic category for systems comprises the interrelationships between sub-components of the other four, generally shown by change across time.
8. Of the myriad systems significant to humans, the most important are those in which humans themselves are the primary components. Systems called "SOCIETIES" shape every vital aspect of human life.
9. As with other systems, understanding societies requires analysis in the five major system categories. However, more precise definition of those categories to fit societies and their cultural identity will increase understanding. See (9) through (13) below.
10. Understanding societies requires knowing population levels, population densities and distribution, age distribution, significant subgroups, and other aspects of DEMOGRAPHICS.
11. A society's environment, or SETTING both shapes and is shaped by that society. This setting includes primary elements such as climate, geography, and resources; secondary, human-made elements, such as buildings, cities, factories, farms, means and facilities for transportation and communication, and all the tools and techniques used to create and modify them. Setting also includes the influence of other, interacting societies.
12. The significant PATTERNS OF ACTION between humans in a society are those involved in such processes as production and interchange of goods and services, collective decision making, communication, transportation, creating families, raising and educating the young, etc. Major subsystems often form around each of these patterns.
13. The major forces that underlie important patterns of action are the SHARED IDEAS AND VALUES within a society. Every society has a dozen or so of these ideas and values that are most significant, differing in important ways from society to society. In the attempt to make sense of any society, nothing leads to more insight than increased understanding of these dominant ideas and values.
14. Societies CHANGE across time, often in profound ways. Making sense of historical change requires a discovery of links within and between environment, demographics, patterns of action and shared ideas.
15. Societal change most often occurs because of changes in demographics or environment. Patterns of action and shared ideas/values both tend to be stable and resist change, but will evolve, usually in response to changes in demography or environment.

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We believe that every course at every level would benefit if each learners' role is active rather than passive, if reality (rather than second-hand versions of it) is the primary learning resource, and if learning is organized by a study of relationships and the networks of relationships that make up systems.

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