# Connectors 

## line labels stating the relationship between two or more ideas _Keith Lenz, KU-CRL research scientist

## Descriptive structures

## 1. Explanation

Clustering: Single group of information categorized by common relationships
$\qquad$ is similar to $\qquad$ works like $\qquad$


Parts: Arrangement of items that make up a whole
$\qquad$ is a part of $\qquad$
$\qquad$ makes up $\qquad$


Characteristics: List of qualities that define an item
$\qquad$ defines
$\qquad$ is made of $\qquad$
$\qquad$ is $\qquad$
is made of


Examples: Representatives of a group or topic (May include nonexamples for contrast)
$\qquad$ is an example of $\qquad$
$\qquad$
$\qquad$ is not an example of
$\square$ such as $\qquad$


Hierarchy: 2 or more groups of information categorized by levels of specificity, importance, etc.
$\qquad$ is related to $\qquad$ -
$\qquad$ is categorized with $\qquad$ includes $\qquad$


Collection: Single group of items that belong together, but that are not related in any of the above or more specific ways.


## 2. Comparison

Comparison: Identification of similarities among topics
$\qquad$ is the same as $\qquad$ is similar to $\qquad$
___ parallels $\qquad$


Contrasting: Identification of differences among topics
$\qquad$ is different from $\qquad$
$\qquad$ contrasts $\qquad$versus $\qquad$


## Connectors, continued

Comparing and contrasting: Identification of both similarities and differences among topics
$\qquad$ is like $\qquad$ and not like $\qquad$
$\qquad$ parallels $\qquad$ and contrasts $\qquad$


Analogy: Correspondence in some way(s) between items otherwise dissimilar
$\qquad$ is to $\qquad$ as $\qquad$ is to $\qquad$ is like $\qquad$


Metaphor: Corresponds in all conceptual ways between items otherwise factually dissimilar


## 3. Deliberation

Pros and cons: Lists of advantages and disadvantages of a topic
$\qquad$ is good because $\qquad$ ____ is bad because $\qquad$ .
$\qquad$ 's advantages are $\qquad$ -


## Sequential structures

## 1. Order

Rank: Information organized according to some comparative value (e.g., size, priority, importance)
$\qquad$ is more colorful than $\qquad$ is most important $\qquad$


Time: Unrelated events that do not influence each other's place in time came before $\qquad$
$\qquad$ came after $\qquad$


## 2. Process

Timing: Related events organized according to time
$\qquad$ comes before/after $\qquad$
$\qquad$ follows $\qquad$
$\square$ precedes $\qquad$


## Connectors, continued

Steps: Steps of a process organized according to their occurrence
$\qquad$ is the first step of $\qquad$ is the last step of $\qquad$


Cycle: Shows process or series that repeats itself
$\qquad$ returns to become $\qquad$
$\qquad$ is once again
$\qquad$ becomes $\qquad$ becomes $\qquad$
$\qquad$ causes $\qquad$ causes $\qquad$
$\qquad$ leads to $\qquad$ leads to $\qquad$
$\qquad$ then $\qquad$ then $\qquad$ then __


Flowchart: Shows the progression of steps, events, etc., in which the order is determined by decisions or outcomes at each step
$\qquad$ causes $\qquad$ which causes
$\qquad$ which causes leads to $\qquad$ which leads to $\qquad$ which leads to $\qquad$


Feedback loop: Shows a process or series that may return to the beginning (or some previous step) depending on any one intermediate outcome in the chain of events


## 3. Causality

Cause and effect: Shows an outcome and what led to that outcome


Occurrence and consequence: Shows an event and the result of that event
$\qquad$ caused $\qquad$
resulted in $\qquad$


Cause-effect-consequence: A chain of causality showing a final outcome (consequence), an intermediate force (effect), and the initial reason for the chain (cause).
$\qquad$ causes $\qquad$ because of $\qquad$
$\qquad$ is caused by $\qquad$ which is necessary because of $\qquad$


Causal timeline: A timeline indicating events in the order they influence one another
$\qquad$ , which then caused $\qquad$
$\qquad$ lastly produces $\qquad$


## Connectors, continued

4. Problem and Solution

Problem and Solution: Identification of a challenging situation and its resolution (actual or potential)
$\qquad$ could be/is solved by $\qquad$
$\qquad$ resolves $\qquad$


Problem, solution, and results: Potential or actual challenge(s), resolution(s), and implications of the resolution(s).
$\qquad$ solves $\qquad$ which causes
$\qquad$ is solved in $\qquad$ which
results in $\qquad$


## Summer institute set

The University of Kansas Center for Research on Learning is sponsoring a summer institute in California that will introduce teachers to key components of the Strategic Instruction Model.

The Promoting Content Literacy through the Strategic Instruction Model summer institute will take place June 17-21 in Sacramento, California.

Teachers who attend the institute are asked to bring key instructional materials for one of their courses (such as textbooks, worksheets, and assignments). Teachers will be introduced to Strategic Instruction Model principles and then will develop a set of materials for a course and a key unit. Participants will learn how to embed and support the development of reading strategies during group content-area instruction.

Institute facilitators and SIM Trainers Cathy Spriggs and Peggy GravingReyes plan to address the following critical questions during the week:

- How do I target content that will lead to content mastery and literacy improvement across my entire course? (SMARTER Planning for Smarter Teaching and Creating and Living with Critical Course Questions)
- How do I target content that will lead to content mastery and literacy
improvement for my unit and day-to-day group instruction? (The Unit Organizer Routine)
- How do I develop vocabulary and address varying levels of background knowledge that affect content mastery and literacy improvement across my classes? (The Concept Mastery Routine and The Vocabulary Routine)
- How do I embed strategies into my content-area instruction that will improve important reading and thinking skills required for literacy? (The Paraphrasing Routine and The Framing Routine)
- How do I integrate my teaching routines and efforts to teach strategies into text-based chapter reading assignments? (The Survey Routine) This summer institute will count as an update training session for certified SIM Trainers.

The cost for the institute is $\$ 750$, which includes continental breakfast, lunch, and materials. Payment is due by May 10, 2002.

For more information and a registration form, contact Janet Roth at KU-CRL, jroth@ukans.edu or (785) 864-4780 or visit our web site at www.ku-crl.org.

## simuille

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## SIMuille

SIMville is the first place to look for training and classroom activities. From the Center's web site,
www.ku-crl.org
click on "SIM Trainer Resources." When you select the log on option, you will be asked for a password. Type "strategic" in the box (do not type the quotation marks). The password is case-sensitive, so you must use all lowercase letters. Click on the "OK" button. To bypass the password screen in the future, bookmark the first SIMville page.

## New on SIMville:

- Updated directory information form http://www.ku-crl.org/ trainers/forms/directory.html
- 2002 International SIM Trainers' Conference information, including registration form, call for presentations, preconference information http://www.ku-crl.org/ trainers/updates/ conference.html

