

Strategies for Advanced Thinking

LID

To help me compare and contrast ideas.

This strategy is helpful in studying ideas that have to be compared based on their similarities and differences. Making such comparisons is necessary for most, if not all, academic subjects. It is important to write down or draw the relationships because it is easier to understand relationships when they are shown visually.

List the items.

- Make a list of the items to be compared.
- Write these items at the top of a column.
- For example, if for your science class you were comparing the three freshwater ecosystems, then you would have three columns, one for rivers, another for ponds and lakes, and another for wetlands.

Identify the similarities and differences.

- Use a systematic approach to identify factors for comparing each of the items. These factors should be based on your readings and lecture notes.
- Write one factor on each line. Then go across the columns and ask yourself if this factor applies to the item in a particular column. If it does, put a check in the column. If it does not, leave the column blank.
- Analyze the columns. If there is a check going across all the columns, then this factor is a shared similarity of all the items. If there is a check going across some of the columns, then the factor is shared by those items listed at the top of the columns. Those items without checks differ. Likewise, if items do not have checks, then they share the similarity.
- After you have constructed the listings, verbally describe the similarities and differences among the items to yourself.
- For the example of the rivers and streams, ponds and lakes, and wetlands, they all are similar on the first factor which is freshwater ecosystem. The second factor (they flow in and out of each other) applies to rivers and streams and ponds and lakes, but not to wetlands so rivers and streams and ponds and lakes are similar on this factor, but wetlands differ. The third factor (may be temporary) applies only to wetlands so rivers and streams and ponds and lakes are similar on this factor, but wetlands differ.

Draw a graphic representation of the relationship of the items.

- If you are comparing two items, draw a Venn diagram with two partially overlapping circles. Write the similarities of the two items in the overlapping part of the circles and write the differences in the parts of the circle that do not overlap.
- Color coding when writing similarities and differences may also be helpful. You may want to write factors that are similar in one color and factors that differ in another.