

CONCEPT ATTAINMENT MODEL

PALINDROMES

Susan Talkmitt, Texas Tech University T-STEM Center/CISER

The concept attainment strategy inspires students to use critical thinking strategies to find critical attributes of a given concept. It seems like a game to students, but it actually requires higher level thinking skills.

Use pictures, words, and/or actual objects to present the concept attainment strategy. Sequence the items in the order provided. Always start with a “yes” example. Follow with a “no” example. The additional examples should be given in random order. Do avoid giving too many “no” examples at one time. They are given to help clarify what the “yes” examples have in common.

Procedure:

1. Give the examples in the order listed.
2. During the strategy, ask for additional “yes” examples to verify that students are getting the concept.
3. Provide a “twist” to promote higher-level thinking. (Students are lead to think a concept until an example stumps them and causes them to regroup.)
4. Once most students seem to have the concept, ask for critical attributes that describe the concept.
5. Record their list of critical attributes where they can be observed.
6. Look at the critical attributes and pull from the students a rule or a name for the concept. Give the name “palindromes” after students have the attributes as this is probably a new vocabulary term for many students.
7. Have students discuss their thinking processes throughout the strategy beginning with their first assumptions and how they changed.

Examples:

<u>Yes</u>	<u>No</u>
1. Dad	2. Brother
3. Mom	4. Sister
6. Pop	5. Cousin
7. Eve	8. Aunt
9. Nun	10. Grandmother
11. Madam (twist)	12. Mother
13. Noon	14. morning
15. level	16. rear
18. A Toyota	17. A Ford
19. Able was I ere I saw Elba	
20. radar	

All of the “yes” examples represent palindromes. The rule is that all words or phrases read the same from the front and the back.