



Critical Thinking

Adam Zrust, PhD

Northwest Missouri State University



Why schools need to embrace kids' creativity

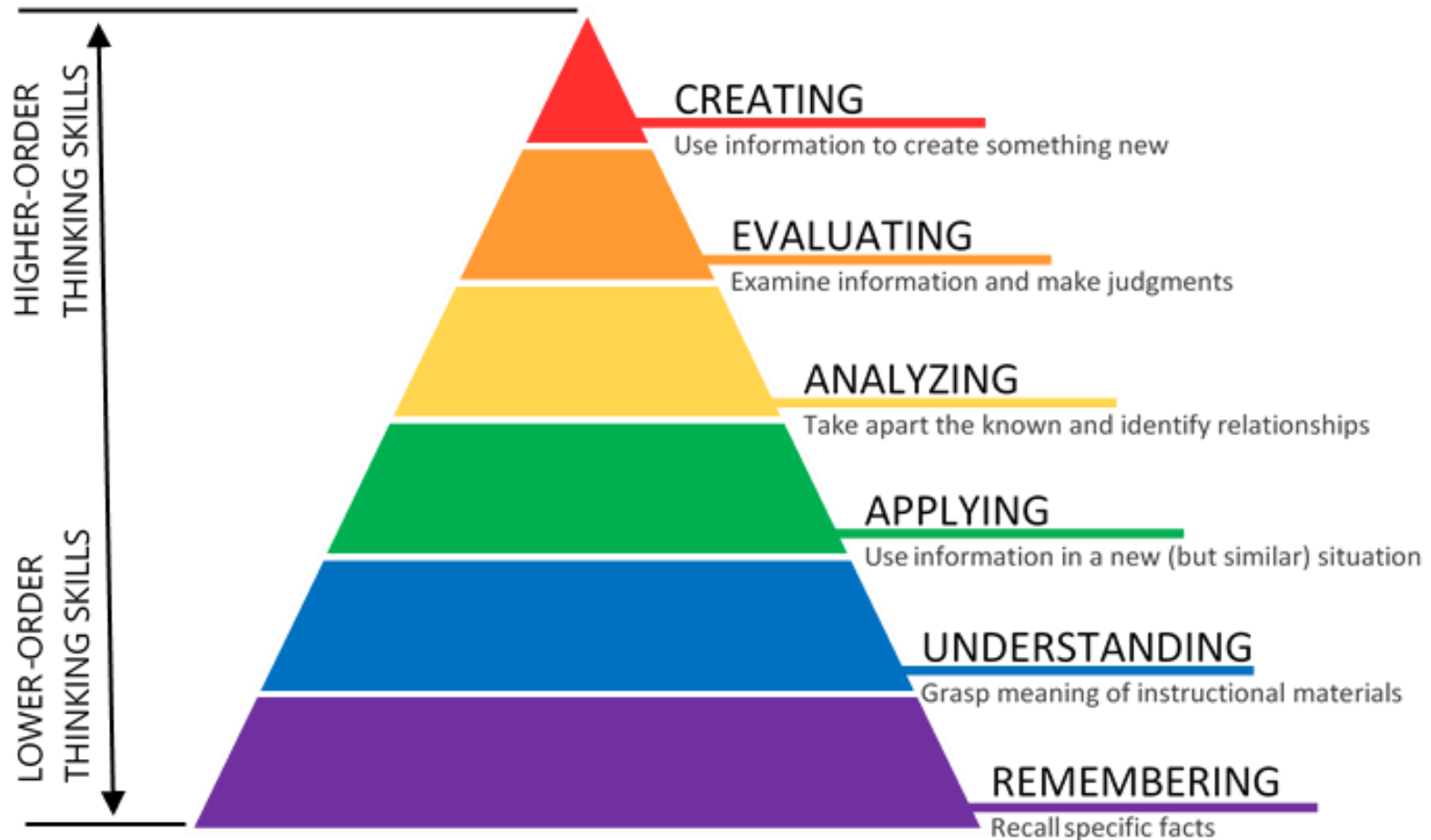
SIR KEN ROBINSON



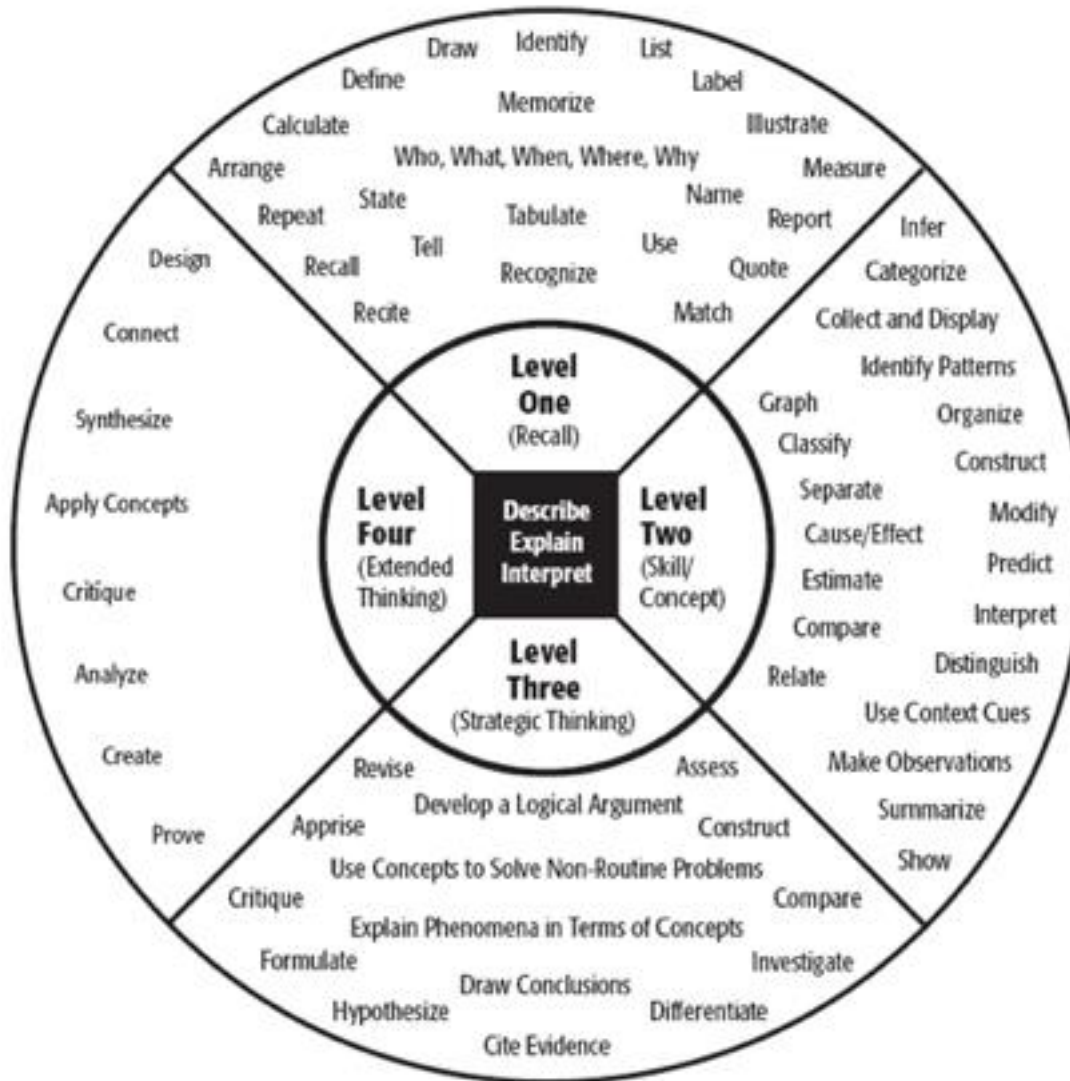
"We don't grow into creativity.
We grow out of it."

-Sir Ken Robinson

BLOOM'S TAXONOMY – COGNITIVE DOMAIN (2001)



Webb's Depth of Knowledge Chart (DoK)



Participant Session Goals

1. Modify an existing or create a new project that demonstrates critical thought.
2. Reflect on what lectures you have that could be more student-centered via guided discussions?

We are trained from a very early age to think vertically, not horizontally. Consequently, the process of realizing that everything relates to everything does not always naturally occur. Transfer does occur unless instructors teach for transfer (Madsen & Madsen, 1970).

Acquiring the Skill to Sing in Harmony

- **Steps to building harmony skill (Bowers):**
- 1. Unison
- 2. Add an ostinato
- 3. Partner songs
- 4. Add a descant
- 5. Vocal chording
- 6. Parts of a canon or round
- 7. Canon or round
- 8. Transitional (several combined elements from above)
- 9. 2–4 part songs



A Thing I Made

For Choral Lit



Valse de Allegretto ♩. = 56

Fourth time only

4. Descant

I am the des - cant who sings a - bove the

Sing each time

1. Melody

I am the me - lo - dy to be sung with an o - ste - na - to, a

Third time only

3. Partner Melody

I am the part - ner who sings the coun - ter me - lo -

Fifth time only

5. Harmonic chording

I IV IV

Second time only

2. Ostinato

o - sti - na - to o - sti - na - to o - sti - na - to

4

me - lo - dy through - out this piece!

des - cant, and may - be some har - mo - ny!

dy to com - pli - ment this piece!

I V I

O - sti - na - to O - sti - na - to!

***Developed groups are welcome to add parts upon each repeat (up through the fourth), rather than replacing them, resulting in four-part structures. Displace octaves as needed.

"Tell me and I forget. Teach me and I remember. Involve me and I will learn."

-Attributed to Benjamin Franklin

Stopping by the Woods on a Snowy Evening

by Robert Frost



Twitter post
challenge

Whose woods these are I think I know.
His house is in the village though;
He will not see me stopping here
To watch his woods fill up with snow.

My little horse must think it queer
To stop without a farmhouse near
Between the woods and frozen lake
The darkest evening of the year.

He gives his harness bells a shake
To ask if there is some mistake.
The only other sound's the sweep
Of easy wind and downy flake.

The woods are lovely, dark and deep,
But I have promises to keep,
And miles to go before I sleep,
And miles to go before I sleep.

Embedding Problem Solving

(Paul, 2020)

1. Begin your instruction with a problem to solve.
2. Create provisions for follow-up.
3. Provide opportunities for reflection.
4. Work Socratically.
5. Use collaborative problem solving.
6. Design assignments that encourage an emotional hook, reinforce meaning and relevance for the student, and which incorporate novelty, humor, and problem solving.
7. Provide Role-immersion experiences.
8. Shift traditional lectures to be more student-centered via guided discussions?
9. Design exercises to tap into our non-verbal memory system to enhance student learning.
10. Debate

References

- Abrahams, F., Bowers, J., Head, P., Jordan, J., Liebergen, P., & Porterfield, S. (2011). *Teaching Music through Performance in Middle School Choir*. Chicago, IL: GIA Publications, Inc.
- Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., & Wittrock, M. C. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman.
- Garrett, M. L. (2013). An examination of critical thinking skills in high school choral rehearsals. *Journal of Research in Music Education*, 61(3), 303-317.
- Henke, H. H. (1984). The application of Emile Jaques-Dalcroze's solfege-rhythmique to the choral rehearsal. *The Choral Journal*, 25(4), 11-14.
- Killian, J. N., & Henry, M. L. (2005). A comparison of successful and unsuccessful strategies in individual sight-singing preparation and performance. *Journal of Research in Music Education*, 53(1), 51-65.
- Madsen, C. H., & Madsen, C. K. (1970). *Teaching: discipline: behavioral principles toward a positive approach*. Allyn and Bacon.
- Mann, B. A. A. (2008). *The effect of vocal modeling on student achievement and attitude* (Doctoral dissertation, University of Oregon).
- Paul, Sharon J. (2020). *Art and Science in the Choral Rehearsal*. Oxford University Press. DOI: 10.1093/oso/9780190863760.001.0001
- Watkins, R. E. (1986). *A descriptive study of high school choral directors' use of modeling, metaphorical language, and musical/technical language related to student attentiveness (rehearsal, verbalization)* (Doctoral dissertation, University of Texas at Austin, 1986). *Dissertation Abstracts International*, 47, 5A.
- Yarbrough, C., Price, H. E., & Bowers, J. (1991). The effect of knowledge of research on rehearsal skills and teaching values of experienced teachers. *Update: Applications of Research in Music Education*, 9(2), 17-20.