Exploring Leadership



PROBLEM SOLVING: EVALUATION

The majority of young adults know that they do or don't like something, but they don't always know why. They have strong opinions, but they can't defend them in a reasonable, logical way. By guiding them with specific questions, we can help young people develop their critical evaluation skills and increase their understanding of why something is or isn't good, valuable, or true. By encouraging young people to adopt a critical approach to consuming information, we prepare them to be engaged citizens in a democratic society.

CONVERSATION STARTER:

Is the earth a living organism that adapts to what humans do to it, or are we killing it? How you answer this question is not as important as WHY you answered it that way.

Everyone has an opinion, but only an *informed* opinion has any merit. If you just believe everything anyone tells you, you probably need to practice your evaluation skills. When you evaluate something, you decide if it is good, worthwhile, or true. The reason you should master this is because you live in a high-tech world where people are always trying to tell you "facts" that aren't facts, sell you products you don't need and services you don't want. The key to evaluation is not just having the facts but knowing who is presenting them and why.

KEY OBJECTIVES:

Critically evaluate factual information.

WHAT YOU'LL NEED:

 Copies of the paragraphs about DHMO (Appendix)

EXPLORATION ACTIVITIES:

Divide participants into small groups (4-5) and give each group one of the paragraphs about DHMO.

• Every statement in all the paragraphs is a fact, but until you see all the facts from all the paragraphs, you will not have the whole story. With your group, evaluate and discuss the facts in the paragraph you've been given and try to establish what the purpose of the paragraph is. (Why are the facts being presented?)

FACILITATOR TIP:

- Some groups may already known the "trick" to this activity, encourage them to keep it within their group and the activity should still be successful.
- If time allows, have the groups share their paragraphs to show they are factual but not necessarily "true"

- Also, what can we do to neutralize the threat of DHMO? Come up with one suggestion your group can share aloud and one question you would like to have answered.
- Give the groups five minutes to analyze their paragraphs.
- Let each group share their suggestions and ask their questions. (If another group can provide the answer, have them do so when appropriate.)
- Now share the fact that is not mentioned in any of the paragraphs:
 DHMO (dihydrogen monoxide) is water (H2O). All the paragraphs can be re-analyzed with this in mind and will still make perfect sense, but now the deception is clear.



REFLECTION QUESTIONS:

- In your group evaluation of the facts, were you suspicious that there was something tricky going on? Why?
- What did your group think was the purpose of the facts being presented?
- How can actual facts be used to tell lies or give biased information?

APPLICATION DISCUSSION:

- What are some other facts you encounter in real life that you should evaluate critically before believing them or taking action?
- What are some ways to evaluate facts to see if they tell the whole truth?



CONCLUSION:

Don't be fooled. Always check the facts and evaluate information before you act on it. Well-developed evaluation skills will not only help you succeed in school and business but they are necessary for all engaged citizens in a democratic society.

Utah State University is an affirmative action/equal opportunity institution and is committed to a learning and working environment free from discrimination. For USU's non-discrimination notice, see equity.usu.edu/non-discrimination.

REFERENCES

- https://www.edutopia.org/practice/mastering-self-assessment-deepening-independent-learning-through-arts
- https://www.ideaedu.org/idea-notes-on-learning/learning-to-analyze-and-critically-evaluate-ideas-arguments-and-points-of-view/
- https://www.dhmo.org/
- $\bullet \ \ \, \underline{\text{https://www.publichealthontario.ca/-/media/documents/A/2015/at-a-glance-10step-evaluation.pdf?la=en} \\$



APPENDIX —

Dihydrogen monoxide (DHMO) is a colorless, odorless, tasteless compound that kills thousands of people every year. Most of these deaths are caused by accidental inhalation of DHMO, but the dangers do not end there. Symptoms of DHMO ingestion can include excessive sweating and urination, nausea, vomiting and body electrolyte imbalance. For those who have become dependent, DHMO withdrawal means certain death, and dependence is common because it has been allowed to contaminate the entire American food supply. Not only is it an additive in many highly processed "junk foods," but it has been in such wide use for so many years that it is now in the soil. Even after thorough washing, produce remains contaminated by DHMO. Companies dump waste DHMO into rivers and the ocean, and nothing can be done to stop them because this practice is still legal. (Visit https://www.dhmo.org/ for more information.)

Dihydrogen monoxide (DHMO) is a colorless, odorless, tasteless compound that kills thousands of people every year. The impact of DHMO on nature and wildlife is extreme. Also known as hydroxyl acid, DHMO is the major component of acid rain. It contributes to the "greenhouse effect" and the erosion of our natural landscape. DHMO has been detected in almost every stream, lake, and reservoir in America, but the pollution is global, and it has even been found deep in Antarctic ice. DHMO has caused millions of dollars of property damage in the midwest and recently California. Despite the danger, DHMO is often used as an industrial solvent, as a coolant in nuclear power plants, in the production of styrofoam, and in the distribution of pesticides. (Visit https://www.dhmo.org/ for more information.)

Dihydrogen monoxide (DHMO) is a colorless, odorless, tasteless compound that kills thousands of people every year. Not only can DHMO cause severe burns on contact with human skin, but prolonged exposure to its solid form causes severe tissue damage. The fact that it has been found in the excised tumors of terminal cancer patients indicates that DHMO contamination is reaching epidemic proportions. There is almost no aspect of American life that has not been impacted by DHMO, yet the American government has refused to ban the production, distribution, or use of this damaging chemical due to its "importance to the economic health of this nation." (Visit https://www.dhmo.org/ for more information.)

Dihydrogen monoxide (DHMO) is a colorless, odorless, tasteless compound that kills thousands of people every year. Since it accelerates corrosion and rusting of metals, DHMO has been implicated in electrical and brake failure in automobiles for years, but now the navy and other military organizations are conducting experiments with DHMO and designing multi-billion dollar devices to control and utilize it during warfare situations. Hundreds of military research facilities receive tons of it through a highly sophisticated underground distribution network. Many store large quantities for later use, and America is not the only world power to do so. (Visit https://www.dhmo.org/ for more information.)