



Reasoning with Ethics

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A Project of The School for Ethical Education | www.ethicsed.org

Ethics in action creates character.

Use this blog to:

1. Lead class discussions in social studies, civics, ethics, or advisory classes.
2. Teach students skills to analyze cases with core ethical values.
3. Recognize skills in support of SEE's Tri-Factor Model of ethical functioning.

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Ethical Hero Passes

Allan J. McDonald passed on March 6, 2021, at the age of 83. He was employed by Thiokol Chemical Corporation as a rocket scientist for over 42 years and led their space shuttle solid rocket motor project during the time of the Challenger Shuttle explosion in 1986. The Challenger blew up shortly after takeoff, killing all the crew. This was ultimately attributed to temperatures at the launch site, which were too cold for O rings that helped sustain the rocket motors.



Before the launch, McDonald and a team of Thiokol engineers had recommended that the launch should be postponed due to the unusually cold temperatures and concern for the rocket's O rings. They had placed their concern in writing, which was overridden by Thiokol management under pressure from NASA. On launch day, Mr. McDonald continued his objections personally and refused to sign-off on the launch paperwork. NASA launched anyway with the resulting loss of the shuttle and all seven lives onboard.

The ethical challenges continued for Mr. McDonald as a commission was established to look into the disaster. NASA and Thiokol management sought to cover up the O ring failure. McDonald spoke up at a hearing to testify of the pre-launch concerns raised by his engineering team. He was able to highlight the written warning that had been given to NASA. Thiokol management and NASA were upset with McDonald's testimony. This led to McDonald being disciplined by Thiokol and ultimately required an act of Congress (the only time in history) to reinstate him with a promotion for his ethically courageous actions.

McDonald was often noted to say, "Do the Right thing, for the Right Reason, at the Right time, with the Right people, and you will have no Regrets. It will help you sleep well for the Rest of your life. You don't always have to be Right, but you always have to be honest."

McDonald recognized his actions on launch day and at the commission hearing risked his employment, but he acted on what he believed was right. Students are asked to consider what core values did Mr. McDonald demonstrate? In any ethical dilemma, what type of pressure might make someone compromise their core values? Finally, are there decisions or actions one might take to resist pressure from others or circumstances to act unethically?

Supplemental Links

NPR Story, McDonald sought to stop Challenger Launch--
[//www.npr.org/2021/03/07/974534021/remembering-allan-mcdonald-he-refused-to-approve-challenger-launch-exposed-cover?utm_source=facebook.com&utm_medium=social&utm_campaign=npr&utm_term=nprnews&utm_content=20210307&fbclid=IwAR00CpoWFMIyrrXGWISEOn1PvJ5nc3Zc99EYT_CxdC1Kmt-RBNNPSmYcO-4](http://www.npr.org/2021/03/07/974534021/remembering-allan-mcdonald-he-refused-to-approve-challenger-launch-exposed-cover?utm_source=facebook.com&utm_medium=social&utm_campaign=npr&utm_term=nprnews&utm_content=20210307&fbclid=IwAR00CpoWFMIyrrXGWISEOn1PvJ5nc3Zc99EYT_CxdC1Kmt-RBNNPSmYcO-4)

McDonald on Challenger Disaster (in his own words) (11/18/15) (20:28)--

https://www.youtube.com/watch?v=ObtY_WI-hYI

Standard-Examiner, McDonald refused to sign-off on Challenger Launch--

https://www.standard.net/news/local/allan-mcdonald-thiokol-engineer-who-refused-to-sign-off-on-challenger-launch-dies-in-ogden/article_4ccb3ba6-1bda-5dec-8530-528678209cfb.html

Obituary for Allan James McDonald-- <https://www.legacy.com/us/obituaries/name/allan-mcdonald-obituary?pid=198024683>