The Illinois Two-Minute Challenge (2MC) Approach

Originally developed for teaching ethics and professional responsibility at the University of Illinois Urbana-Champaign by C. K. Gunsalus, two-minute challenges are a form of micro-teaching designed to present realistic dilemmas in research ethics, along with a structured decision-making framework for responding. The National Center for Principled Leadership and Research Ethics (NCPRE) hosts a library of 2MCs on its ethics resource (https://www.ethicscenter.csl.illinois.edu/) that can be used as stand-alone materials and that connect to other resources including teaching materials, bibliographies, videos, etc. We welcome your contributions and additions to the library, as well as suggestions for topics for new 2MCs.

What is a two-minute challenge (2MC)?

Each 2MC presents a dilemma based on real-life situations. Though they cannot all necessarily be resolved in two minutes, they usually require some kind of response in two minutes—or less. The 2MCs provide an opportunity, in a safe educational setting, to work through each challenge. The 2MCs are designed around problems that are directly relevant to the audience for which they are intended.

How can 2MCs be used in instruction?

2MCs can be posed, discussed and debriefed within short periods of time, permitting them to be used as discussion starters, segments of larger class sessions, at a journal club, or in a workshop on research ethics. Topics covered by the 2MCs map to the Responsible Conduct of Research (RCR) education topics mandated by federal regulations. For example, in a class on research methods, a 2MC that relates to the topic of the class could be used as an opening or concluding segment. A 2MC could be also be assigned as a homework question and then later discussed in class or used as a short writing assignment. For those who will be leading discussion of the 2MC, there is an annotated discussion leader outline. Each 2MC also includes a bibliography and links to current articles and events that help connect its topic to broader readings and resources.

Why this decision-making framework?

Different approaches to decision-making exist in ethics instruction, in universities and in corporations. This particular framework covers many of the questions that need to be addressed to resolve successfully dilemmas of professional and research ethics. Repeated demonstration and use of a structured analytical decision-making approach for ethical dilemmas can help develop moral reasoning. The goal is to foster more independent and sophisticated reasoning.

Pedagogical Framework

Using 2MCs promotes experiential, interactive learning, engaging learners in realistic situations they may encounter in research or professional life. Professor Gunsalus refers to this as the inoculation approach to problems: exposure to potential issues in small doses can keep students from developing full-blown cases of ethical problems later in their research careers.

The 2MC approach to research ethics is intended to present ethical dilemmas as part of everyday life. The goal of this approach is to foster deeper thought about resolving dilemmas of professional and research ethics, and to develop analytical habits for approaching them. Too often research and professional ethics education focus on compliance with regulations rather than fostering moral development and professional skills. The 2MCs are designed to assist emerging professionals in identifying problems and developing thoughtful responses to them, including where helpful, possible personal scripts that can be used to address a problem while preserving professional reputations and options.

Decision-Making Framework

1. What issues does this situation present?

2. What rules and regulations apply?

3. What questions do you need/want to ask?

4. What resources are available to you to work through this situation?

5. What options do you have? Who will be affected by each?

6. What are you going to do?

Summary of Michael Mumford's Findings
Effective Research-Based Ethics Education

The 2MC methodology tracks nicely with Michael Mumford's findings on the elements of effective ethics education, because using them repeatedly in class meets his criteria, especially if you work through possible responses as you use them with your group. In summary, his findings are that the most effective approaches are:

▸ Active, cooperative and iterative

▸ Use relatively short cases

▸ That have an emotional impact: use real people, real life stories

▸ Provide positive as well as negative examples

▸ Analysis modeled and practiced

▸ Demonstrate strategies for response

▸ Apply labels

▸ Elicits forecasting (anticipating consequences)

▸ Encourages emotional regulation; self-reflection

M. D. Mumford et al., Ethics Behav. 17, 337 (2007).

M. D. Mumford et al., Ethics Behav. 18, 315 (2008).

Presentation Techniques: Developed in Conjunction with Business 101

The 2MC and decision-making framework have been tested and developed over many years in professional responsibility (ethics) courses in the College of Business at the University of Illinois, and also in a wide range of RCR settings. Business 101 was the first course to develop 2MCs for each week of a 16-week semester, tied to the learning goals of each week and the overall course. The following techniques have been developed, tested and adapted in conjunction with C. K. Gunsalus, Gretchen Winter and the Section Leaders of Business 101.

Classroom Discussion Applying the Decision-Making Framework

Whether assigned in advance or raised in the classroom, having a slide or other visual with the key elements of the challenge and then a second with the decision-making framework questions can be helpful so there are visual cues to support the discussion.

An effective technique is to have the headings for each of the questions written on a blackboard, like this:

Issues   rules   questions   resources   options   who affected?

The instructor should know how he or she feels about the scenario and be prepared to encourage a range of views on it, as well as to drive the discussion to some take-home points. Possible suggestions are included in the discussion leader guide.

Guide students through the two-minute challenge in a conversational manner, while a scribe selected from the class records student suggestions for each element of the decision-making framework in turn on the board. Having a student serve as scribe can be effective, depending on the size of the class. If the size of the group permits, have students write their own responses on the board, allowing them to get up and be active participants.

Before / After Discussion Allowing for Anonymous Change

Read the two-minute challenge, show students the options, and have students immediately pick an answer by raising their hands or writing their answers down on an index card. Next, proceed through the decision making model, and then have students redo their option and see what changed. Ask students what made them change their mind. This is helpful in showing how going through the decision-making model really will help in ethical situations. (This can also be done with clickers or other response technology.)

Think-Pair-Share; Small Group Discussions

Lay out a range of options that you would consider (including options that you deem inappropriate) and ask each to reflect a bit, making notes. Then ask students to debate whether the options are appropriate with nearby students. This allows an airing of approaches before hearing the opinion of the discussion leader. Ask groups to share thoughts with the class. Explore what would distinguish a "good" choice from one that is less good.

Acting Out / Role Plays

Put students in groups of four and assign them to go through the decision-making model together. Ask each group to develop a short skit demonstrating the situation to be presented in front of the class. This creates a fun environment and captures attention. Ask the group to reflect/discuss the presentations. Alternatively, assign roles and ask students to role play the situation in front of the entire group.

Debate

Divide students into groups based on their initial reaction to the 2MC. Ask them to develop supporting reasons for their choices. Set up a debate in which groups try to persuade the other side as to the best choice. Allow students the opportunity to switch sides if they would like. After debate, have students return to their desks for a reflection on what happened and what the "right" answer could be.

Label Career TRAGEDIES Lurking in the 2MC; Applying the Decision-Making Framework

As the dilemma is described, ask students to identify each of the possible Career TRAGEDIES framework used by Gunsalus (see separate handout) lurking in the situation. Use the analytical decision-making framework to identify questions, resources, options, etc. for avoiding the career tragedy.

> Temptation
>
> Rationalization
>
> Ambition
>
> Group/peer/authority pressure
>
> Entitlement
>
> Deception
>
> Incrementalism
>
> Embarrassment
>
> Stupid Systems

Writing Prompt

Use the 2MC as a short-response or one-minute writing prompt: give a few moments for everyone to think about the dilemma, and then ask each to fill out the decision-making framework for the dilemma. This links nicely to think-pair-share or other classroom discussion approaches, or as a standalone quick exercise or homework assignment.