



INSTRUCTOR'S GUIDE



Teaching Technique 27

Variations

ACTIVITY TYPE

- Project Learning
- Group Work
- Learning Assessment

TEACHING PROBLEM ADDRESSED

- Surface Learning
- Cheating

LEARNING TAXONOMIC LEVEL

- Application: Critical Thinking
- Application: Creative Thinking
- Application: Problem Solving

Variations

In *Variations*, students create an altered version of the original, such as rewriting the ending of a story or imagining the consequences of a changed event in history.



1

Clarify your teaching purpose and learning goals for *Variations*

2

Select the item you wish to use as the stimulus or starting point

3

Set assignment parameters (such as the specific analysis prompts)

4

Develop a plan for learning assessment or grading

5

Communicate assignment instructions to students

6

Allow students time to work on their *Variations*

7

Reflect upon the activity and evaluate its effectiveness

Step-By-Step Instructions

In this section we provide you with guidance on each of the seven steps involved as you consider this technique.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

Variations challenges students' creativity as they imagine and evaluate alternatives to a given stimulus in order to 'build' something new. It is a useful technique for assessing the Application learning domain of the Taxonomy of Significant Learning (Fink, 2013). Indeed, *Variations* can promote all three of the Application learning dimensions: problem solving, critical thinking, and creative thinking. Furthermore, because a *Variation* on a given stimulus tends to be quite unique, the assignment discourages cheating.

Although the *Variations* technique is presented as an individual project, it can also work effectively as a group project (see the Support Materials section).

STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

Students create an altered version of the original, such as:

- Rewriting the ending of a story.
- Imagining the consequences of a changed event in history.
- Composing a different conclusion to a famous musical composition.
- Using an iconic art image as the basis for a new work of art.

For your course, you will need to select the item that you wish to use as the stimulus or starting point for the activity. It is useful to reflect upon the stimulus yourself and brainstorm ideas for how you might create the variation, noting your thought processes as well as any problems you encounter.

STEP 3: SET ASSIGNMENT PARAMETERS

Once you have identified the stimulus or starting point for the *Variations*, use your own experiment as the basis for writing assignment directions that include logistical aspects such as:

- How much time students will be given for the activity.
- How they will submit their work.
- Whether they will do the assignment individually or collaboratively.

Step-By-Step Instructions (CON'T)

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

Once considered the domain of artists, inventors, and eccentrics, creativity today is recognized as an important, if not essential, skill for success in multiple arenas. Although most of us feel reasonably confident that we recognize creativity when we see it, actually pinning it down in a precise definition that applies across contexts has confounded scholars for decades.

Consensus appears to be moving toward recognition of two core elements: production of something that is novel and valuable. Anderson and Krathwohl (2001, pp. 84–88) note that the novelty aspect is challenging for educators, and they therefore shift the emphasis to synthesis. In their taxonomy, “to create” requires students to construct an original product by drawing upon elements from many sources and then putting them together into a new structure. Faculty working on AAC&U’s Creative Thinking VALUE Rubric also emphasize the importance of making connections and synthesizing. Thus, in education, creative thinking is often a process by which students take pre-existing ideas, influences, or objects and combine them in such a manner as to make a new and organized presentation that is more than what the student had at the beginning.

In *Variations*, you scaffold the development of this kind of thinking by challenging students to imagine and evaluate alternatives to a given stimulus in order to build something new. To assess this technique, you may want to consider adapting or using the Creative Thinking VALUE Rubric (<https://www.aacu.org/value/rubrics/creative-thinking>).

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

Create a handout that includes directions and clarifies your expectations and assessment criteria.

STEP 6: IMPLEMENT THE TECHNIQUE

- Distribute the handout and explain the activity to students, perhaps using your experiment as an illustration.
- Have students create and submit their projects.
- Use your rubric to assess the projects.

Step-By-Step Instructions (CON'T)

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

When reflecting on the activity and how effective it was, consider the following questions:

- Did the technique match the course learning goals and objectives?
- Did it meet my goals for this learning module?
- Was it appropriate for the students?
- Did the technique keep the students engaged?
- Did it promote student learning?
- Did it provide me with information about student understanding?

If you answer yes to all or most of these questions, next consider how you might improve the activity for the next use.

Support Materials

The materials in this section are intended to help you with the process of implementing this technique.

VARIATIONS AND EXTENSIONS

While this project is very appealing to many students, some students who feel that they are not creative may resist it. Explain that creativity requires taking a risk, and that ideas will flow more freely if they quiet their internal judgmental voice. You might also consider using brainstorming techniques to help students generate ideas for the *Variation*. Also, consider providing students with additional support by scaffolding this technique and breaking the process down into manageable parts. Here are some ideas for varying the project.

- Have students do this project in pairs or in small groups. This takes the focus off a single individual and may make the assignment more fun.
- Instead of a single *Variation*, use the concept of “Theme and Variations,” in which students create multiple versions altering different components. For example, in music, in which *Theme and Variations* is a well-established compositional form, one variation might change the harmony from major to minor mode, another variation might change the rhythmic organization from duple to triple meter, a third variation might change the texture from homophonic to polyphonic.
- Have students share their *Variations* with each other, either as a presentation during class, uploaded for display on a website, or using another one of our techniques such as *Class Book* which showcases students’ collective efforts.
- Instead of creating a product that is a variation, have students look at a stimulus from varied perspectives. For example, in a process called “Cubing,” (The Writing Center, 2009), students are asked to look at a topic from six different directions (representing the six sides of a cube) and respond to these directions:
 - › Describe it.
 - › Compare it.
 - › Associate it.
 - › Analyze it.
 - › Apply it.
 - › Argue for and against it.

Online Adaptation

This section is intended to help you with the process of implementing and assessing *Variations* in your online class.

HOW TO START

- Prepare by selecting a historical event, story, or work of art, and brainstorm ideas for how you might create your own *Variation*. This can be anything from:
 - › Rewriting the ending to a story.
 - › Reimagining the consequences of a changed historical event.
 - › Creating a different ending to a musical composition.
- Use your thought process and any problems encountered in creating your own *Variation* as the basis for writing assignment instructions in your Learning Management System.
- Decide how much time students will be given to complete their own *Variation*, how they will submit their work, and whether they will do the assignment individually or collaboratively.
- Once completed, consider having students share their work and explanation of it with their peers in a discussion forum or synchronous videoconference session.

Technique Template

Following are two templates to assist you as you think through how you might implement this technique in your own class. The first is a completed template, providing an example of how Elizabeth Barkley adapted *Variations* in her course, *Theory and Musicianship III*. The second is a blank template for you to fill out to tailor this technique for your course.

Technique Template

Sample Variations Completed Technique Template:

Content from Elizabeth Barkley

Theory and Musicianship III

Course Name

COURSE CHARACTERISTICS

What are the situational factors that impact this course? For example, is it on campus or online? How many students? Is it lower division or graduate? Are there student attributes such as attitudes, prior knowledge, reasons for enrolling, and so forth that should be taken into account as you consider this technique?

My course is an on-campus section of a lower division General Education course that meets the Humanities requirement. It is the third course in a series of courses that are an introduction to the fundamentals of music and their application to composition and music literature. It enrolls about 25 students, most of whom intend to be music majors.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

Why are you choosing this technique? What do you hope to accomplish?

I want to use Variations as one of the final projects to help students synthesize their understanding of historical style principles. I will select a well-known folk song (such as Greensleeves) and ask students to arrange it as a short keyboard piece in the style of any one of the following composers: Bach, Mozart, Beethoven, Chopin, Debussy, Bartok, or Ives.

STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

What is the question you want learners to address, or problem you want them to solve?

The underlying question is whether or not students understand stylistic characteristics of different historical periods sufficiently to write a keyboard piece in that style. By choosing the "variations" approach, my hope is that the differentiating aspects of each style will be highlighted.

STEP 3: SET ASSIGNMENT PARAMETERS

What are the assignment logistics? For example, will this be assigned individually or is it group work? How long will the assignment take? Will students be submitting a product? What materials, resources, or additional information do you anticipate needing?

Although I can see the benefits of making this a collaborative technique, this first time implementing it I will make it an individual assignment.

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

If you decide to assess learning, how will you determine that learning has occurred? For example, will you use a simple +/check/- grading system? If you use a rubric, will you use an existing one or create one? What will be your criteria and standards?

I will need to create a rubric to assess this project. Creating a good rubric will take time, as I can imagine that I will need to separate out the different structural elements, such as melody, rhythm, harmony, texture, and form, for the criterion.

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

How will you communicate assignment parameters to students? For example, through a handout? A prompt on a presentation slide? Assignment instructions in your online course?

I will compose my own variations to demonstrate, and I will create a handout that includes the original (Greensleeves) as a simple lead sheet.

STEP 6: IMPLEMENT THE TECHNIQUE

How will you adapt steps/procedures for your students? Are there any additional logistical aspects to consider?

Other than basic assignment instructions that include the Greensleeves lead sheet, I may want to consider a recital after the deadline so that students can hear each other's compositions. I will have to decide how students who are not keyboard players will have their composition performed. Perhaps I can play them, or give extra points to a student peer who plays them.

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

Note: This step will be completed after you have implemented the technique.

Did this technique help you accomplish your goals? What worked well? What could have been improved? What might you change if you decide to implement the activity again?

I did decide to have a recital of their compositions at the end of the term, and we had fun celebrating students' collective achievements. I will definitely continue to use this as a capstone activity for the year-long course.

Technique Template

This template is intended for use when planning to implement **Variations** in your class. Fill in the blanks below, and use the information provided elsewhere in the Instructor's Guide to assist you in your thinking.

Course Name

COURSE CHARACTERISTICS

What are the situational factors that impact this course? For example, is it on campus or online? How many students? Is it lower division or graduate? Are there student attributes such as attitudes, prior knowledge, reasons for enrolling, and so forth that should be taken into account as you consider this technique?



STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

Why are you choosing this technique? What do you hope to accomplish?




STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

What is the question you want learners to address, or problem you want them to solve?



STEP 3: SET ASSIGNMENT PARAMETERS

What are the assignment logistics? For example, will this be assigned individually or is it group work? How long will the assignment take? Will students be submitting a product? What materials, resources, or additional information do you anticipate needing?



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Note: This step will be completed after you have implemented the technique.

Did this technique help you accomplish your goals? What worked well? What could have been improved? What might you change if you decide to implement the activity again?

References and Resources

PRIMARY SOURCE

Content for this download was drawn primarily from “Student Engagement Technique 17: Variations” in *Student Engagement Techniques: A Handbook for College Faculty* (Barkley, E.F., 2010), pp. 226-228. It includes material that was adapted or reproduced with permission. For further information about this technique, including examples in both on campus and online courses, see the primary source:

Barkley, E. F. (2010). *Student Engagement Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass.

CITATIONS AND ADDITIONAL SUGGESTIONS FOR FURTHER READING

- Barkley, E. F. and Major, C. H. (2018). *Learning Assessment Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass.
- Fink, L.D. (2013) *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. San Francisco, CA: Jossey Bass.
- The Writing Center. University of North Carolina at Chapel Hill. Handouts and Links: Brainstorming. Retrieved (2009) from <http://www.unc.edu/depts/wcweb/handouts/brainstorming.html>

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