

INSTRUCTOR'S GUIDE



Teaching Technique 25

Triple Jump

ACTIVITY TYPE

- Group Work
- Learning Assessment
- Presentation
- Project Learning

TEACHING PROBLEM ADDRESSED


- Surface Learning
- Poor Attention/Listening
- Low Motivation/Engagement

LEARNING TAXONOMIC LEVEL

- Application: Analysis & Critical Thinking
- Application: Problem Solving
- Integration & Synthesis
- Caring

Triple Jump

A *Triple Jump* is a three-step technique that requires students to think through and attempt to solve a real-world problem.

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- 1 Clarify your teaching purpose and learning goals for the *Triple Jump*
 - 2 Develop a scenario that involves an authentic, open-ended problem
 - 3 Think through the timing and the resources you will need
 - 4 Construct an assessment rubric
 - 5 Create and distribute assignment instructions and rubric
 - 6 Implement the *Triple Jump* technique
 - 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

The *Triple Jump* is a problem-solving technique that is particularly effective in courses that are practical in nature and are well-suited to real-world or clinical problems. While students work through it, they learn directly about course content through gathering and applying resources. Students gain experience at solving real-world problems that are messy and may have multiple correct answers or multiple ways to arrive at an answer.

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

Students think about, research, and then present solutions to an authentic, open-ended, compelling problem.

STEP 3: SET ASSIGNMENT PARAMETERS

The three basic steps of the *Triple Jump* are:

- Step 1:** Students individually review the case/problem and give a preliminary assessment (e.g. what I know, what I need to know, how I can find it out).
- Step 2:** Students individually conduct research to find the information they need to offer a solution.
- Step 3:** Students present a final analysis (e.g. here are the key issues of the case and here is how I would solve it or here is the answer). All students should be required to do this at the same deadline, which is why self-made videotapes are useful.

To prepare to implement a *Triple Jump*, consider the following:

- Seek out current resources and cases to develop a real-world scenario that involves a compelling problem. The problem should be well-designed but open ended so that it allows students to demonstrate thinking outside the box.
- Think through the timing and the resources you will need. Since it requires students to demonstrate problem-solving ability in real time, this teaching technique is time and resource intensive. You will need a sufficient time span to conduct the activity that involves research on the students' part, usually about 3 hours. You will also need to decide how students will think through the problem (verbally or in writing) and how they will report out (presentation to the full class or video-taped responses). Consider especially how you will deal with all of the students finishing their work simultaneously (in which case videotaping can be a useful option).

Step-By-Step Instructions (CON'T)



STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

Triple Jump is an effective assessment of a student's ability to plan and work through the problem-solving process, as it aims to document their processes in real time. The process includes reasoning and decision making, self-directed learning, and self-assessment skills. Thus, *Triple Jump* provides evidence of both problem-solving ability and self-regulation.

The *Learning Artifacts* for the assessment of this technique are the tangible product from initial problem-solving planning, the record of resources consulted, and the final analysis and solution to the problem. *Learning Artifacts* can also include your own notes (and potentially the notes of external assessors if you have involved others).

A *Triple Jump* is a useful technique for both promoting and assessing a wide range of thinking and decision-making skills. Because it is robust and time- and resource-intensive, it is particularly important to think through your teaching purpose and learning goals as you evaluate whether or not this technique would be effective in your course.

Because a *Triple Jump* is an extensive assignment, you will certainly want to assess and grade it. The best method for analyzing and scoring student results on the *Triple Jump* is to use a rubric for evaluating the performance.

Consider the following criteria as you create one:

- Define problem.
- Identify necessary resources.
- Identify potential strategies for solving it.
- Propose solutions.
- Evaluate potential solutions.

You will also want to consider whether you will include other assessors, such as another faculty member; doing so can make the assessment feel more authentic. Also consider the potential for using peer review as a part of this assessment.

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

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

Step-By-Step Instructions (CON'T)



STEP 6: IMPLEMENT THE TECHNIQUE

- Give students your handout that includes the problem, instructions, and assessment criteria.
- Students individually read through the case and present an oral or written review of the case, including: interpretation of the evidence presented in the problem, initial exploration of critical elements of the problem, and generation of potential solutions.
- The student conducts an information search independently.
- Each student uses the information that he or she has gathered to find a problem resolution and prepare a presentation of the findings. (This phase is time intensive, and asking students to video their responses can help to alleviate the time sensitivity of having several students presenting at the same time.)
- The student also presents a self-assessment of performance.
- Collect the written or video assignments and self-assessments.
- Assess students' work.

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

Consider what worked. Consider what could have been better and why and how. Consider whether *Triple Jump* is something you would like to use in the future. Record your responses so that you can revisit them when you are deciding whether or not to implement the activity in the future

Support Materials

The materials in this section are intended to help you with the process of implementing this technique. For *Triple Jump*, we provide additional guidance on assessment as well as sample prompts.

ASSESSMENT GUIDANCE

After you have evaluated students' problem solutions, consider the following steps:

- Report the results of your rubric scoring to students in writing. If it is possible given the timeframe and number of students you have, providing oral feedback to students can be useful. This activity is best-suited to a high-stakes graded activity. If it is not graded, students will not take it as seriously and thus may not exert the necessary effort.
- Because of the rich data this technique generates and the potential for intensive assessment of the various phases, information viewed in aggregate can provide valuable information.
- Looking at data from an aggregate level, you can review the students' problem solutions you have collected and analyze them for themes. You might recognize consistent themes; for example, you may note that students typically identify the central problem correctly. Alternately, you might note that students struggle to quickly select the most useful resources for solving the problem.
- Consider using a table to record the aggregated results of student performance on this assessment. Look for trends in the different areas, such as consistently high or low scores.
- Use a narrative format to report overarching themes you see in the students' performance.

CRAFTING GOOD PROMPTS

Most learning tasks start with a question to be addressed or a problem to be solved. Modern research is confirming John Dewey's basic premise that meaningful learning starts with the learner's active engagement with a problem. The "problems" that are presented vary by discipline, of course, but Bean (1996, p. 152) advises that generally speaking, learning tasks should be open-ended, requiring critical thinking with supporting evidence or arguments.

The Table below provides a number of question or problem "stems" for crafting task prompts that can be adapted to a variety of learning activities, including several that can be used in *Triple Jump*.

SAMPLE TASK PROMPT STEMS

For Crafting an Authentic, Open-Ended and Compelling *Triple Jump*

QUESTION TYPE	PURPOSE	EXAMPLE
Exploratory	Probe facts and basic knowledge	What research evidence supports ___?
Challenge	Examine assumptions, conclusions, and interpretations	How else might we account for ___?
Relational	Ask for comparison of themes, ideas, or issues	How does ___ compare to ___?
Diagnostic	Probe motives or causes	Why did ___?
Action	Call for a conclusion or action	In response to ___, what should ___ do?
Cause & Effect	Ask for causal relationships between ideas, actions, or events	If ___ occurred, what would happen?
Extension	Expand the discussion	What are additional ways that ___?
Hypothetical	Pose a change in the facts or issues	Suppose ___ had been the case, would the outcome have been the same?
Priority	Seek to identify the most important issue	From all that we have discussed, what is the most important ___?
Summary	Elicit syntheses	What themes or lessons have emerged from ___?
Problem	Challenge students to find solutions to real or hypothetical situations	What if? (To be motivating, students should be able to make some progress on finding a solution, and there should be more than one solution.)
Interpretation	Help students to uncover the underlying meaning of things	From whose viewpoint or perspective are we seeing, hearing, reading? What does this mean? or, What may have been intended by . . . ?
Application	Probe for relationships and ask students to connect theory to practice	How does this apply to that? or, Knowing this, how would you . . . ?
Evaluative	Require students to assess and make judgments	Which of these are better? Why does it matter? and, So what?
Critical	Require students to examine the validity of statements, arguments, and conclusions and to analyze their thinking and challenge their own assumptions	How do we know? and, What's the evidence and how reliable is the evidence?

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 an instructor in an online nursing course implemented *Triple Jump* in her course, *Nursing Care for Older Adults*. The second is a blank template for you to fill out to tailor this technique for your course.

Technique Template

Sample Completed *Triple Jump* Technique Template:

Content from Elizabeth Barkley

Nursing Care for Older Adults

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?

Note: This is not a course I, Elizabeth Barkley, teach. I do not think Triple Jump would be an effective technique in my course, and I am therefore using this template to describe its implementation in a more appropriate course that is one of the examples from the Triple Jump technique in our book, Learning Assessment Techniques.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

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

The instructor had a learning outcome stating that students will be able to develop an appropriate protocol for working with difficult patients. This learning outcome corresponded with one in the college of nursing's curriculum map, and as such, it was one that instructors had to embed in each course. Instructors also had to document student achievement in this area for the School of Nursing's assessment committee. This instructor hoped Triple Jump would provide an appropriate course activity and assessment data.

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 instructor developed a problem about a developmentally disabled 19-year-old who is 30 weeks pregnant. The problem indicates that the patient is difficult and argumentative and has been physically abusive to past health care workers.

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?

The instructor developed a problem about a developmentally disabled 19-year-old who is 30 weeks pregnant. The problem indicates that the patient is difficult and argumentative and has been physically abusive to past health care workers.

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?

The instructor recruited two of her colleagues to help assess the student submissions. Each instructor was asked to use a rubric to rate the initial analysis and the final analysis. The instructor planned to average the scores on each item to give to each student. She then planned to aggregate the individual results to determine an overall picture of student problem-solving skills and to report the results to the college's assessment committee via a written description of the course and activity along with a numeric table summarizing results.

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?

The instructor presented instructions through the assignment pane of the LMS for her online course.

STEP 6: IMPLEMENT THE TECHNIQUE

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

The instructor presented the problem in the online course's LMS. Students had to develop a protocol for how they would interact with the patient. As their first assignment, they submitted their initial analysis of the problem. Over the next two days, they conducted research and then had one additional day to post their video solutions to the problem.

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?

The instructor found the assignment to be a useful one on multiple levels and continued to implement it in subsequent classes.

Technique Template

This template is intended for use when planning to implement **Triple Jump** 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?



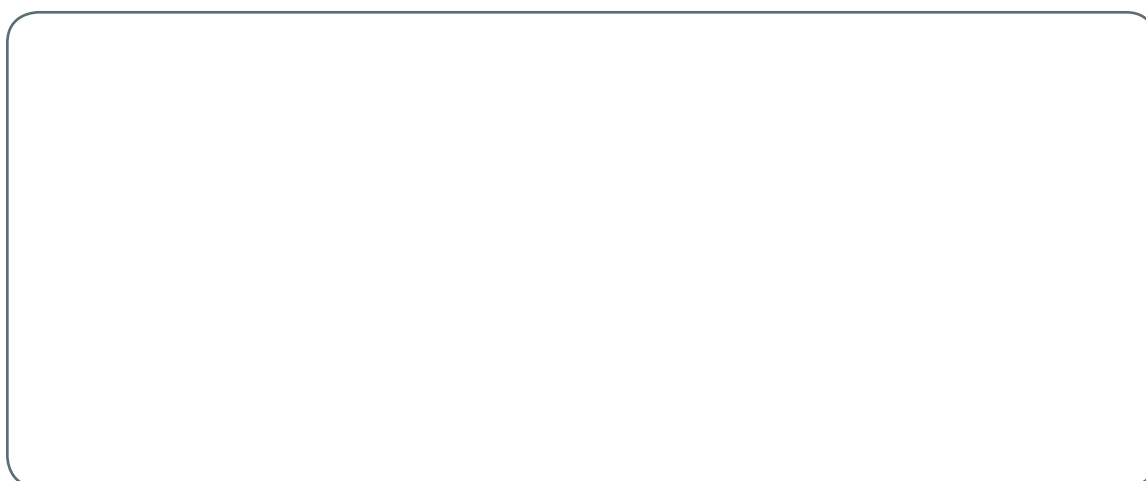
STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

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?



STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

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STEP 6: IMPLEMENT THE TECHNIQUE

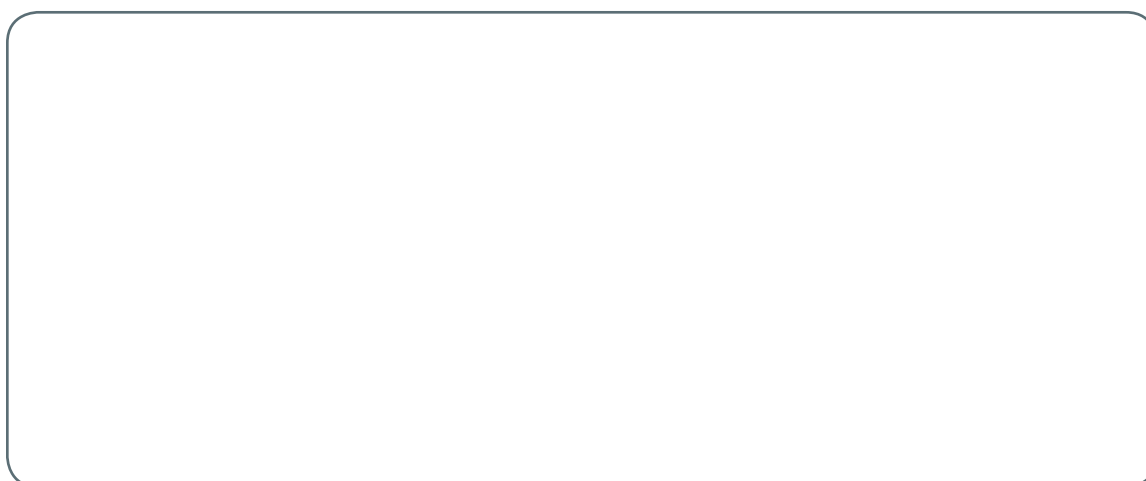
How will you adapt steps/procedures for your students? Are there any additional logistical aspects to consider?



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?



References and Resources

PRIMARY SOURCE

Content for this download was drawn primarily from “Learning Assessment Technique 19: Triple Jump.” Barkley, E. F. & Major, C. H. (2016). *Learning Assessment Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass, pp. 153-158. It includes material that was adapted or reproduced with permission. For further information about this technique, including examples in online and on campus courses, see the primary source:

Barkley, E. F., Major, C. H. (2016). *Learning Assessment Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass.

CITATIONS AND ADDITIONAL SUGGESTIONS FOR FURTHER READING

- Feleti, G., & Ryan, G. (1994). The Triple Jump Exercise in Inquiry-Based Learning: A Case Study. *Assessment & Evaluation in Higher Education*, 19(3), 225-234.

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