THE K. PATRICIA CROSS ACADEMY

INSTRUCTOR'S GUIDE

Teaching Technique 50

Sentence Stem Predictions

ACTIVITY TYPE

- Active/Engaged Learning
- Reflecting

TEACHING PROBLEM ADDRESSED

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

LEARNING TAXONOMIC LEVEL

- Application: Analysis and Critical Thinking
- Integration and Synthesis

THE K. PATRICIA CROSS ACADEMY

Sentence Stem Predictions

In *Sentence Stem Predictions (SSP)*, the professor presents a partial sentence that is structured to prompt students to predict select aspects of the upcoming lecture.

1. **Clarify your teaching purpose and learning goals for the *SSP***
2. **Review your lecture and identify places for students to predict outcomes**
3. **Set assignment parameters (create the stems, determine how to present, etc.)**
4. **Develop a plan for learning assessment or grading (optional)**
5. **Communicate assignment instructions to students**
6. **Implement the 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

In *Sentence Stem Predictions*, the professor presents a partial sentence that is structured to prompt students to predict select aspects of the upcoming lecture. The professor may use several stems throughout the lecture to guide student prediction making. To make logical predictions prior to receiving new information, students must use information from previous lectures and their prior knowledge. Although students often enjoy what they see as a guessing activity, predicting requires moving beyond guessing and instead involves previewing the lecture content to anticipate what may happen in it.

Prediction helps students set a purpose for listening. As students make predictions, they are more likely to be invested in the content. Because Sentence Stem Predictions provide scaffolding for student learning, this technique should also improve student understanding. *Sentence Stem Predictions* provide professors with insight into student understanding about a topic. This technique can also reveal when and where students have misconceptions. When professors review student predictions, they can address in the moment any misconceptions or gaps in understanding.

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

Making predictions is a strategy in which learners use information they have gleaned from other assignments and their own personal experiences to anticipate what they are about to hear in a lecture.

STEP 3: SET ASSIGNMENT PARAMETERS

- Review your lecture plans and identify 2–3 potential places where it is possible for students to predict outcomes related to specific content.
- Prepare a list of sentence stems with phrases that will encourage students to make predictions at the different points during the lecture you have identified. The stems should be tailored to the lecture content. Here are some generic examples that can be adapted for a number of purposes:
    - I think I will learn…because…
    - I'll bet…because…
    - I predict…because…

Step-By-Step Instructions (CON'T)

  - I think…will happen because…
  - X will happen if…
  - I wonder if…because…
  - I suppose...because…
  - I imagine...because…
- Make sure you can respond to the prompts yourself.
- Decide how you will integrate the *Sentence Stem Predictions* into the lecture presentation. If you have a slide deck, creating a slide with the stems that students record on their own paper is a useful approach. You could also consider polling slides. Alternately, consider providing a handout that students fill in as you announce the stems (page 7).

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

If you wish to assess the predictions, determine your criteria and standards. We have included additional assessment guidance as well as sample rubrics in the **Support Materials** section of this document.

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

Sentence Stem Predictions can be communicated to students simply by posting them on the board or in a presentation slide. Or you can create a handout that includes all of the *Sentence Stem Predictions* for a single lecture along with directions and your expectations and assessment criteria.

STEP 6: IMPLEMENT THE TECHNIQUE

- Announce the activity and tell students when they will make predictions (for example, before the lecture and once or twice during the lecture).
- Present the sentence stem prediction and ask students to record their responses. Consider asking a few volunteers to share their answers.
- Proceed with the lecture.
- Continue the pattern of prediction followed by short lecture until you have completed your prompts.

Step-By-Step Instructions (CON'T)

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

- 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. For *Sentence Stem Predictions*, we provide additional guidance on assignment parameters.

CRAFTING EFFECTIVE PROMPTS

Some students may be tempted to coast and answer with surface level thoughts or even to say, "I don't know." Inviting them to clarify why they think that by asking "How do you know you're correct?" can help discourage the easy out.

Students should be as specific as possible about their predictions. Because this technique is more open-ended than prediction activities that have close-ended choices, this can be more challenging to accomplish. When you write your prompts for your specific lecture, try to tie them to something concrete, for example, by asking students to predict specific outcomes or tying the responses to a set of percentages.

Be sure that you integrate the "because" into the questions. You want students to think through their predictions and provide a rationale for them.

A generic sample handout is provided on page 7.

SAMPLE SENTENCE STEM PREDICTIONS HANDOUT

	I PREDICT...	BECAUSE...
Stem 1		
Stem 2		
Stem 3		
Stem 4		

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 a Professor adapted *Sentence Stem Predictions* in their course, *Constitutional Law*. The second is a blank template for you to fill out to tailor this technique for your course.

Technique Template

Sample *Sentence Stem Predictions* Completed Technique Template:

Content from *Interactive Lecturing: A Handbook for College Faculty*

Constitutional Law

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?

This onsite course involves the study of legal cases to understand essential principles of Constitutional Law.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

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

The professor uses case law to provide insight into how Constitutional controversies are resolved and can influence subsequent case resolution. Since the case law helps judges, lawyers, and students predict the outcome of future cases, the professor decided use Sentence Stem Predictions to have students make predictions as well.

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?

In one lecture section on the subject of governmental intervention in cases of private property ownership, the professor introduced the case of Kelo vs. City of New London. In this case, the government condemns private homes as part of redevelopment to sell to other investors. The professor provided a prompt so that students would consider the outcome of the case before she announced it.

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?

She decided to incorporate the activity within the lecture by just pausing and asking students to complete:

I predict _____ *because* _____ .

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?

She decided not to grade the assignment, but instead to use it as a type of formative assessment to check on student understanding within the moment.

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?

She believed the assignment was straightforward enough that she could simply pause, present the prompt, and allow a few moments for students to make their predictions.

STEP 6: IMPLEMENT THE TECHNIQUE

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

The implementation was simple and did not require any additional logistical considerations.

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?

She used the technique several times throughout the lecture and noted that students' answers improved and that more students were answering the prompts correctly by the end of class than at the beginning. She believed that the Sentence Stem Predictions helped them to improve their understanding of the issue.

Technique Template

This template is intended for use when planning to implement ***Sentence Stem Predictions*** 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

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?

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 "Active Learning Technique 6: Sentence Stem Predictions" in *Interactive Lecturing: A Handbook for College Faculty* (Barkley & Major, 2018), pp. 221–227. 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., Major, C. H. (2018). *Interactive Lecturing: A Handbook for College Faculty.* San Francisco, CA: Jossey-Bass.

CITATIONS AND ADDITIONAL SUGGESTIONS FOR FURTHER READING

- Wentzel, K. R., & Brophy, J. (2004). *Motivating students to learn* (4th ed.). New York: Routledge.
- Finley, T. (2014). *Dipsticks: Efficient ways to check for understanding.* Retrieved from http://www.edutopia.org/blog/dipsticks-to-check-for-understanding-todd-finley
- Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

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