

## One Sentence Summary

The One Sentence Summary (OSS) challenges students to answer the questions “who does what to whom, when, where, how, and why?” about a given topic, and then to synthesize those answers into a single summary sentence.

### Procedure for Creating the OSS

1. Select an important class topic or work that you expect student to learn to summarize.
2. Quickly answer “who did/does what to whom, when, where, how, and why?” Note how long it took you to answer.
3. Turn that answer into a sentence. Note how long it took you to write the sentence.
4. Allow your students twice as much time as it took you to carry out the task and give them clear directions on the One-Sentence Summary technique before you announce the topic.

### Pros & Cons

#### Pros

- Quick and easy way to assess student’s ability to summarize a topic.
- Good technique for helping students grasp complex processes and explain them in nontechnical language.
- Requires students to organize the information within a useful, memorable framework making it easier to recall.

#### Cons

- Some material cannot easily be summarized because some questions will have more than one answer.

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the quality of each by writing a zero, a check mark, or a plus above the element. Zero indicates an inadequate or incorrect element; the check means adequate; and the plus sign indicates a more than adequate answer.

You can then make a simple matrix to represent the whole class's responses, with the questions as column heading and the three marks (zero, check, plus) as row heading. When you have totaled the responses, insert the totals in the cells of the matrix and look for patterns of strength and weakness in the responses. For example, the totals can tell you whether your students are better at answering who and what questions than how and why questions.

### **Adapting & Expanding the OSS**

- After the original sentences are discussed, ask students to turn the one sentence summaries into concise, informative two or three-sentence summaries. Ask students to share summaries in pairs or groups.
- Give students time to work in pairs or small group to critique and improve each other's summaries, either before handing them in or after getting them back.
- Use the OSS multiple times to summarize different chapters of the same book or different facets of the same subject. Then ask students to summarize the entire book or subject in one paragraph by rewriting and linking their individual single-sentence summaries.

### **Tips for the OSS**

- Don't ask students to write a OSS unless you have first determined that you can coherently summarize the topic in one sentence.
- Limit the topic so that the summary task will deal with a manageable part of the topic. For example, if there are several main characters and actions in a chapter to be summarized, limit the OSS to a specific character.
- Encourage students to make their sentences grammatical, factually accurate, complete, and original. But tell them not to be disappointed if the sentences aren't elegant!

## One Sentence Summary Example

### Example from a Class on Action Research in the Classroom

In the following examples, the steps of the process are provided throughout this handbook on Classroom Assessment in just one sentence. The matrix illustrates a helpful one step leading to the One Sentence Summary.

Who? teachers

Does what? assess

### Example from a Physics Class

To make sure that the student really understood the process of generating electric power, the instructor assigned the student to write a one-sentence summary of the electric power generation process in one sentence. The student wrote "The electric power generation process is one sentence." The instructor asked the student to answer the first side of the page "What is water?" The student answered "What? with water." After reading their summaries, the instructor noticed that the student did not understand the process, he gave his students a sure that everyone understood the process, he provided the students with a few- illustration of the hydroelectric power generation process, briefly explaining each step in writing. He provided the students with a few relevant facts about the system and asked them to calculate force and torque exerted on the turbine and the maximum ideal power output as well.

## Defining Features Matrix

The Defining Features Matrix (DFM) asks

- Can become a low-level assessment of recall skills if students do not understand that the purpose is to help them see patterns.

### **Making Data Actionable**

It's relatively easy to compare the students' matrices with your master copy. You can scan them one by one, indicating incorrect responses on each students' matrix with an X and keep a running tally of incorrect responses on a larger copy of the matrix with

## Defining Features Matrix Example

Example from a class on action research indicating the differences in classroom and institutional assessment. This shows how a matrix can be set up.

	Institutional Assessment	Classroom Assessment	Assessment
al. Standard	-	+	Standardized and
	Large group or whole class		
	Systematic, unrelated data		+
	Snapshot measure		
	Standardized and validated		+
	Instrumental purposes		
	High-stakes consequences		
Flexibility			+
Personal and specific			+
Small group or individual			
Class	-	+	Open
Individualized		+	Defied
High-stakes quality of		+	High
Low-stakes			High

Example from an introductory Psychology course.

To assess how clearly students understand the surface differences between modern Spanish and Portuguese, two closely related Romance languages, this linguistics professor created a Defining Features Matrix focused on the characteristic syntactic, morphological, and phonological contrasts:

Example from a course on the history and development of the romance languages.

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## Misconception/Preconception Check

The Misconception/Preconception Check (MPC) assesses student's prior knowledge, focusing on uncovering prior knowledge or beliefs that may hinder or block further learning. This CAT can uncover specific instances of incorrect or incomplete knowledge, attitudes, or values that represent barriers to new learning.

### Procedure for Creating the MPC

1. Identify some of the most troublesome common misconceptions or preconceptions students bring to your course. Brainstorming this question with colleagues can be effective.
2. Select a handful of these ideas and beliefs – ones you feel are likely to interfere most with learning in your course – and focus the MPC on those ideas and beliefs.
3. Create a simple questionnaire to elicit information about students' ideas and beliefs in these areas. You can use multiple choice or short answer formats. Short answer can uncover more useful information, but compromise anonymity. Multiple choice is safer and easier to analyze.
4. Have another faculty member read your questions and make sure they do not seem patronizing, threatening, or obvious.
5. Before giving the questionnaire, think through how you will respond to several likely outcomes. Strike any questions or topics you do not feel prepared to deal with.
6. Explain your reasons for using this CAT to students, make sure the anonymity of their responses is ensured, and announce when and how you plan to use their feedback.

### Pros & Cons

#### Pros

- Gives instructors a quick way to uncover likely barriers to learning and thus to prepare to meet and overcome them.
- Anonymity means students are likely to reveal their own ideas and beliefs.
- Students may be relieved to learn that they are not alone in being mistaken or unclear about a topic. Feedback can provide reassurance.
- Collecting this CAT can be useful for making program changes. If you see the same misconceptions, you can start conversations in your department about prior learning in prerequisites.

## Cons

- No one likes having his or her certainties questioned; this can be uncomfortable for students.

## Making Data Actionable

Analyzing feedback from this CAT can answer one or more of the following questions: what misconceptions or preconceptions do students have about course material that might interfere with their learning? How many of the students have them? How deeply embedded are these ideas or beliefs?

To answer the first two questions, you can quickly organize the responses into rough categories by type of misconception or preconception, and then tally them. You can best answer the third question by collecting information on the students' degree of certainty or strength of beliefs. As you tally responses, look for patterns within and across items. For example, watch for questions or topics on which the students' responses are clearly divided.

## Adapting & Expanding the MPC

- To encourage candid responses, begin by asking students to identify common misconceptions and preconceptions they think other people have about the topic or field
- Have students work in teams to come up with "reasonable" explanations or justifications for the misconceptions uncovered through the assessment
- Give the same questionnaire later in the term – after your instruction – to see what, if anything, has changed and how.

## Tips for the MPC

- You must tread lightly when dealing with potentially sensitive issues if you want students to open up enough to risk having their assumptions challenged.
- Do not use this technique to focus on issues that students may find personally threatening until a climate of trust and civility has been established in the class.



## Misconception/Preconception Check Example

### Confidence and True/False Statements

She prepared a list of 10 statements about the transmission of HIV/AIDS for a Misconception/Preconception Check. She explained to the students that the purpose of the check was to gather information on what the class as a whole thought about the transmission of HIV/AIDS. She then handed out sheets of lined paper and asked the students to write their answers to three questions, but not their names. She told them they would have five minutes to write. The three questions she wrote on the chalkboard were:

1. About how many people lived in North America in 1491?
2. About how long had they been on this continent by 1491?
3. What significant achievements had they made in that time?

She collected the papers, shuffled them, and handed them back, asking everyone to check their own papers. She then asked the students to check their responses. First she collected the papers for question 1, and then for question 2. She then collected the papers for question 3. She then asked the students to check their responses. She then asked the students to check their responses. She then asked the students to check their responses.

### Open-Ended Questions

On the first day of class, after initial introductions, the instructor in this upper-division course on pre-Columbian history administered a Misconception/Preconception Check. She explained to the students that the purpose of the check was to gather information on what the class as a whole thought about the transmission of HIV/AIDS. She then handed out sheets of lined paper and asked the students to write their answers to three questions, but not their names. She told them they would have five minutes to write. The three questions she wrote on the chalkboard were:

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Having finished the list, the history professor stood quietly. Finally, one of the students asked her what the right answers were. She allowed that this was an important question, but one that would have to wait until the next class. She then asked the students to check their responses. She then asked the students to check their responses. She then asked the students to check their responses.

## What's the Principle?

What's the Principle (WTP) assess students' ability to associate specific problems with the general principles used to solve them. Responses to this CAT tell faculty whether students understand how to apply basic principles of the discipline. It also helps students organize the general types of problems they can solve with particular principles, rather than merely learning how to solve them?







- It is more difficult than it may seem to prepare questions that can be immediately and clearly comprehended and quickly answered.

### **Making Data Actionable**

Tabulating the responses and making note of useful comments i10 (ua4 (a)14(e)-1 (m)p16 ( al 11.04 390o 390o pasqu)-107 Td( )Tj.005 Tw -44.54 -1



## Directed Paraphrasing

Directed Paraphrasing (DP) helps students develop the skill of summarizing specialized information into general language. This CAT provides feedback to students on their ability to summarize and restate important information or concepts in their own words. It allows faculty to assess students' understanding of important concepts that they will later be expected to explain to others.

### Procedure for Creating the DP

1. Select an important theory, concept, or argument that students have studied in some depth. This should be a topic with some implications outside the classroom.
2. Determine who would be a realistic yet challenging audience for a paraphrase on this topic, what the purpose of such a paraphrase should be, and how long (in number of words or amount of speaking time) the DP should be.
3. Try responding to the paraphrase yourself, to see how realistic the assignment is. Can you write an effective paraphrase within the limits given?
4. Direct students to prepare a paraphrase on the chosen topic. Tell them who the intended audience is, what the purpose is, and what the limits are on speaking time or number of words or sentences.

### Pros & Cons

#### Pros

- Builds on and builds up students' skills in actively and purposefully comprehending and communicating information learned.
- Allows instructors to find out quickly and in detail how well students have understood a given lesson, lecture, or segment of the course. This provides direction for instruction and syllabus revision.
- Encourages instructors and students to consider the wider relevance of the subject being studied and the importance of considering the needs and interests of the audience being addressed.

#### Cons

- Unless strict length limits are enforced, DP can take considerable time and effort to assess adequately.
- Can be difficult to establish criteria for a good paraphrase.





## Directed Paraphrasing Example

### Example from Nursing Class

in one or two sentences, paraphrase what you have learned possible hospice care to inform a dying, but still lucid, patient of its potential advantages and disadvantages.

### Example from Computer Science Class

in one or two sentences, paraphrase what you have learned in Spanish language computer viruses—such as the Michelangelo virus— have read about the president of a large insurance firm who is ultimately responsible for a database security. Your aim is to convince her to spend time and money / “revaccinating” thousands of workstations.

### Example from Secondary Science for Teachers Class

First, in no more than two or three sentences, paraphrase the “punctuated equilibrium” model of evolution, which states that evolution is a process of gradual change interrupted by periods of rapid change.