

## **PORPE: A Study Strategy for Learning on the Content Areas**

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If you have ever used an essay examination in your class as a means of measuring student learning, you probably have made the same exclamations that most teachers have: “No more essays!” or “These students can’t write, so why should I waste my time grading these pitiful excuses for essay answers!” or “Did these students even study?”

Students are equally dismayed with the essay test because they have not received any suggestions on how to study for them and, hence, prepare just as they would for an objective test by memorizing and rereading isolated facts and details.

Even though essay tests may pose initial difficulties, they are worth the long-term effort because they encourage students to demonstrate their understanding of concepts in creative and critical ways. The writing process is a powerful means of learning because the more students manipulate content, the more they are likely to remember and understand that content (Langer, 2000). What needs to be done is to teach students a strategy that capitalizes upon the power of writing as a means of learning concepts so they can demonstrate that understanding on an exam. One such strategy is PORPE (Simpson, 1986). PORPE is a study strategy that can be used in any content area course that uses the essay exam to measure learning or any test format that encourages higher levels of thinking such as synthesis, application, and evaluation. Before examining the specific ways in which PORPE can be used in the content area classroom, the rationale and steps of PORPE will be discussed.

### **Rationale and Steps of PORPE**

The five steps of PORPE operationalize the cognitive and metacognitive processes that effective readers engage in to understand and subsequently learn content area material. Baker and Brown (1984) have described effective readers as those who: (a) clarify the purposes of reading (understanding both the explicit and implicit task demands), (b) identify the important aspects of a message, (c) focus attention on the major content rather than the trivia, (d) monitor ongoing activities to determine whether comprehension is occurring, (e) engage in self-questioning to determine whether goals are being achieved, and (f) take corrective action when failures in understanding are determined.

With the first step, *Predict*, students generate higher level essay questions that cover the content to be mastered and call for organized essay responses. By posing several general or higher order essay questions that ask for a synthesis and discussion, a comparison and contrast, or an evaluation of the key concepts from a unit of study, students are stimulated to process the text in a more active or elaborative manner as they read and study (Bean, Readence, & Baldwin, 2007).

The second step of PORPE, *Organize*, involves students in constructing the information that will answer the self-predicted essay questions. In constructing, students

build *internal connections* among ideas so that information becomes reorganized into a coherent structure (Cook & Mayer, 1983). For each predicted essay question, students outline their answers in their own words or formalize them in a map or chart.

The third step of PORPE, *Rehearse*, engages students in the active recitation and self-testing of the key ideas recorded in their maps, charts, or outlines. In a sense, students are verbally answering their self-predicted essay questions so that the key ideas can become transferred to working memory.

The fourth step of PORPE, *Practice*, is the validation step of learning because students must write from recall the answers to their self-predicted essay questions in some public and observable form. They are involved in what Vygotsky (1962) aptly calls the “deliberate structuring of the web of meaning” (p. 100). This process of writing can lead students from passive and literal-minded responses to higher levels of thinking and reasoning such as analysis and synthesis (Langer, 2000).

The final step of PORPE, *Evaluate*, requires students to use their writing in order to validate whether they have created a meaningful text that demonstrates their understanding of the key ideas and to evaluate their text as another reader, such as the content area teacher, might. To facilitate this monitoring and evaluating, students are given a checklist (see Table 8.2) that guides them in determining the completeness, accuracy, and appropriateness of their written product in terms of the original task, the self-predicted essay question. Hence, the students’ essays written in step four, *Practice*, provide them a specific and immediate feedback and reinforcement to their own learning and understanding.

**Table 8.2. PORPE checklist**

	<b>Below Average</b>	<b>Average</b>	<b>Above Average</b>
1. The question was answered.	1	2	3
2. There was an introductory sentence which restated the essay question or took a position on the question.	1	2	3
3. The essay was organized with major points or ideas that were obvious to the reader.	1	2	3
4. The essay had relevant support or examples to prove and clarify each point.	1	2	3
5. The essay used transitions to cue the reader.	1	2	3
6. The essay answer made sense and demonstrated knowledge of the content.	1	2	3

## Using PORPE in the Content Area Classroom

To be effective, any strategy training must occur over time and across many different content areas. If teachers want their students to independently employ a strategy such as PORPE, they will need to incorporate into their lessons the time to provide intensive direct instruction characterized by examples, teacher modeling, guided practice, and specific written and oral feedback.

Tad, an eleventh grade American history teacher, decided to take the time necessary to teach PORPE in hopes of improving his students' analysis and synthesis skills and, subsequently, their essay examinations. At the beginning of second semester he discussed his plan with Susan, the eleventh grade English teacher, who also gave essay tests. Together they decided that Tad would introduce and teach PORPE while Susan would provide reinforcement and additional guided practice by requiring the students to use PORPE for her essay tests over three different novels. Tad decided to spend a week introducing PORPE to his students, knowing that he could review important concepts while teaching the processes involved in PORPE. Susan and he also outlined follow-up activities for reinforcement across the semester. Tad's lessons and suggested reinforcement activities are discussed below.

### Predict

Tad began the first strategy lesson by explaining the steps and rationale of PORPE. He also distributed to his students a laminated index card that listed the steps and processes involved in PORPE. After about five minutes of explanation, he quickly moved into a demonstration of the first step, Predict, from a chapter about the 1950's that the students had just read. Because he realized the importance of this step and the initial difficulty students would have in generating any type of question, Tad decided to introduce the language used for writing essay examination. Using an overhead transparency, he defined common essay starters such as *discuss*, *explain*, *criticize*, *compare*, and *contrast*. He then distributed some sample essay questions that he had created last year so the students could see these essay terms in context.

The next step in Tad's lesson was equally important in that he had to convince his students that essay prediction is not a matter of luck, but of trained insight. "Where do teachers get their essay questions?" he asked. After several humorous responses, one student volunteered that essay questions reflect important ideas. Tad then asked his students to brainstorm all the ways that important ideas are implicitly or explicitly communicated to students. The list that Tad and his students generated included the following: (a) chapter summaries, (b) chapter questions, (c) boldface headings and the chapter organization, (d) lecture and discussion ideas, especially when they overlap with the chapters being studied, and (e) study guides or hints by the teacher.

Using those five guidelines, Tad asked the students to help him list on the overhead the key ideas from the 1950's unit. After considerable prompting, the students identified six or seven key ideas and numerous terms (e.g., blacklisting). Tad then finished the lesson by modeling the processes he had used to combine a key idea with an appropriate essay question starter to form an essay question. The questions in Table 8.3 are some of the essay questions he had predicted for the Fifties unit. Tad then assigned the students for the next class to gather information that would answer each of the predicted

questions. He reminded them to check their textbooks, study guides, and notes from lectures, discussions, and films.

**Table 8.3. Predicted essay questions over fifties unit.**

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1. Compare and contrast Eisenhower's term of office to Truman's term. Include in your discussion their economic and social goals, achievements, and failures.
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2. Discuss the affluence and anxiety that occurred during the fifties.
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3. Discuss the Red Scare that took place during the fifties. Include in your discussion the individuals responsible, the possible causes, and the impact of the Red Scare on our country.
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Although Tad planned on teaching the Organizing step of PORPE for the next class period, Susan and he planned on returning to the following activities to reinforce the Predict stage:

1. Model again the process of predicting essays with another unit of study.
2. Provide students the stems for potential questions, and ask them to finish writing the questions over a specific topic (e.g., Compare and contrast using the topic of Eisenhower and Truman's years in office).
3. Assign students to predict a certain number of essay questions over a unit of study. During class ask students to share in small groups, selecting the best essay questions and noting the similarities and differences in their predictions.
4. Explain and model the process of asking higher level questions.

### **Organize**

Tad's goal with this step was to teach his students how to organize the information that would answer the predicted essay questions. He especially wanted his students to feel comfortable using their own words, making their own connections between ideas, and being creative in structuring and formatting. He began the second lesson by displaying on an overhead the chart he had used to organize the information that would answer the question about Truman and Eisenhower. The chart made explicit the similarities and differences between the two Presidents, thus facilitating the thinking necessary to fully answer the predicted essay question. As the students copied the chart format, Tad walked around the room to determine what the students had used in their formats. Most of the students had outlined, and a few had merely taken random notes without any structure. They all agreed, however, that the chart was more useful than their outlines and random notes in organizing key ideas.

Tad then introduced the mapping format for the second essay question about affluence and anxiety. After showing them a skeleton map with no key ideas filled in, he modeled the processes involved in completing the section about affluence. Then he asked the students to work in pairs to finish the section about anxiety. For the next class Tad assigned the students to design a chart or map for the third essay about the Red

Scare.

Because the students were given tremendous amounts of support in their organizing for this first lesson, Tad and Susan used the following activities later in the semester to reinforce the Organize step:

1. Distribute sample organizational structures (i.e., filled in charts, maps, outlines) for the students to critique. Include a few inadequate samples that ignore the question, overlook key ideas, or concentrate too heavily on unimportant details.
2. Assign students to predict a possible essay question and design an organizational structure that would answer the question. Put students in pairs to evaluate the organizational structure on the basis of appropriateness, accuracy, and completeness.
3. Distribute a sample essay question and ask students to share their organizational structures on the board or overhead.

### **Rehearse**

Tad began the third lesson by reviewing the steps of PORPE while selected students charts, Tad stopped them after three minutes to discuss their difficulties and frustrations. He had wisely set the scene for a discussion on the differences between recall and recognition and, hence, the necessity of Rehearsal for an essay examination. Because many of his students memorize through the *osmosis* principle—if I stare long enough, my brain should absorb all information—he modeled the processes he used to memorize and rehearse the information with the Red Scare example. He then assigned the students to Rehearse their organizational structure on the Red Scare before the next class period. Throughout the semester Tad and Susan modeled how they rehearsed ideas and paired students to conduct their own talk throughs of their maps and charts.

### **Practice and Evaluate**

Realizing that many students would not see a need to go beyond the Rehearsing step of PORPE, Tad began his fourth lesson with this analogy:

Imagine that you have decided to run a grueling 20-mile race that has \$5,000 in prizes. Would you train for it by running or by walking? Of course, you would train by running—only a fool would consider her/himself ready for a long run with practice sessions of walking. Because running and walking are not equivalent in what they demand, you wisely select to train in the way you will have to perform on race day. Why then would you consider yourself ready for an essay test when you have not written any practice answers? Thinking you are ready is not equivalent to knowing that you are ready. How do you know that you are ready? By running those 20 miles in a practice session or by writing before the exam.

Tad then asked his students to describe what criteria they thought he used when grading essays. As expected, many students volunteered answers that dealt with length or quantity, but a few students mentioned qualitative criteria such as organization and specificity. Tad then placed on the overhead the criteria he would use for grading their

essays on the Fifties Unit of study: organization, specificity, completeness and accuracy, and a match between the question asked and the answer provided.

In order to further stress the idea of a well organized and complete essay answer, Tad distributed three essay answers which he jokingly referred to as *The Good, The Bad, and The Ugly*. These were essays on the Truman and Eisenhower administrations that students had written the year before. One essay was concise, accurate, and well organized, one was lengthy yet totally disregarded the question asked, and the third was brief, disorganized, and contained inaccurate information. Tad asked the students to assign a letter grade to the three essays and to jot down the reasons for their grades. If they thought key ideas were omitted, they were to list them in the margins. A rousing discussion followed as students discussed and defended their grades.

Earlier that day the students had received a handout from Susan that listed hints on to how to *interpret* an essay question and how to organize an essay answer. Some of her suggestions are below:

1. Read each essay question carefully, underlining key words.
2. Before you begin to write the answer to the essay question, quickly sketch the map or chart in the margin of your paper so you will have it readily available to guide your writing.
3. Make sure your opening sentence rephrases the essay question and/or takes a position.
4. Make sure the overall structure of the answer is obvious for the reader by using transitional clue words like *first*, *on the other hand*, and *furthermore*.
5. Include examples of each major point. Never assume knowledge for the reader or evaluator.
6. Reread the essay and check it against the map or chart to insure that you have included all the key ideas and examples and that you have answered the question that was asked.

Tad reviewed this handout with the students and then assigned them to write a *good* essay answer to the predicted question on the Red Scare.

The next day in class Tad put the students in pairs and distributed the PORPE checklist (see Table 8.2) for them to use in evaluating each other's essays. While the students were reading their partner's essay, Tad circulated the room to discover some exemplary essays that he could subsequently share with the entire class. After reading the exemplary essays and discussing the experience of Practicing and Evaluating with the students, Tad assigned the class to write the answers to the other two predicted essays and to evaluate their own answers with the checklist. He closed the lesson by reminding them that their essay test on the Fifties Unit would be Monday.

Tad and Susan planned numerous follow-up activities for the semester that would quickly reinforce the processes of Practice and Evaluation while also reviewing the concepts of their history and English units. Several times during the semester they modeled the processes and decisions they made as they composed an essay on the overhead. They involved students in many practice and evaluation simulations, gradually moving them to the objective evaluation of their own writing. Finally, they provided the

students frequent and specific feedback on their practice and final essays by using the PORPE checklist.

### **The Advantages of PORPE**

PORPE has many advantages for the student and content area teacher. Most importantly, it is a strategy that can begin as teacher directed and initiated and then, when appropriate, be gradually phased from teacher to student control. Tad's first week of lessons were heavily teacher controlled, but that intensive direct instruction was necessary for most of his students. By the end of the semester, however, Tad's students were independently employing the steps of PORPE as a part of their study preparation for both history and English.

The research conducted on PORPE suggests several other advantages for content area learning (Simpson, Hayes, Stahl, Connor, & Weaver, 1988; Simpson, Stahl, & Hayes, 1989). These four advantages are discussed below:

1. PORPE can stimulate students to synthesize, analyze, and think about key concepts. The students trained in PORPE who participated in the two research studies cited wrote essays significantly better in content, organization, and cohesion than the control group's essays.
2. PORPE can help students prepare for multiple-choice exams, especially when the questions ask them to draw conclusions and apply information to new contexts. In studies cited the students trained in PORPE scored significantly better on the multiple-choice questions. This finding is unique considering the equivocal findings about the impact of writing upon recognition tasks (King, Biggs, & Lipsky, 1984; Newell, 1984).
3. PORPE can have a durable and long-term impact upon student learning. In studies cited the students trained in PORPE scored significantly better than the control group on the unannounced exam that occurred two weeks after the initial exam. This condition held for both the multiple-choice and essay questions. Perhaps the synergistic steps of PORPE required more elaborative processing from the students, and thus more depth of processing (Bradshaw & Anderson, 1982).
4. PORPE is especially useful for high-risk students. The subjects of both research studies cited were students predicted by the university to perform below a 70% average during their freshmen year. Yet these students internalized the steps of PORPE after three weeks of intensive training and were able to independently employ PORPE as a means of studying psychology chapters. More importantly, they were able to perform at higher levels than the university's regression formula had predicted they would perform.

PORPE is a study strategy that can be incorporated into teachers' instructional routines without jeopardizing the time reserved for teaching content area concepts. PORPE, however, is not a panacea for all tasks, texts, and students. Middle school and secondary students need a repertoire of strategies in order to become successful independent learners.

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