

Analyze Your Test Performance

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Students work hard at studying course content and learning and using test-taking strategies. However, they seldom progress to the important step of analyzing their test performance to determine their knowledge and information-processing strengths and needs. When reviewing a wrong answer, usually you are able to identify when you did not know the theory or principles being tested. However, without a performance analysis, you may not identify the trends in the gaps in your knowledge because you are lacking the “big picture.” In addition, errors often occur because of inept information processing rather than because of lack of knowledge. When reviewing an examination, you might say, “What a silly mistake. I knew that content.” This suggests that you probably made an information-processing error. Unless you identify your knowledge gaps and information-processing errors and take corrective action, you probably will continue to make the same mistakes over and over.

Students frequently do not review their test performance because they believe it is time consuming or they do it in a haphazard, rather than a systematic, manner. A methodical analysis of your test performance is well worth the time and effort. It does take time because you have to stop and think critically about each item you answered incorrectly. However, you must spend time to save time. When you focus your study, you will study “better,” not longer or harder. Also, the results of an analysis of your test performance should identify your information-processing errors. When you are aware of these errors, you can correct them, which should improve your test-taking abilities and ultimately your test grades.

You may find it threatening to analyze your test performance because it requires you to admit that you may be doing something wrong or that you are unprepared in some manner. You need to *get a grip!* Get over this kind of negative thinking! Finding fault is not the focus of a performance review. We all make mistakes. If we were perfect, we would not be human. The important point is that you must learn from your mistakes. If you are having difficulty with controlling negative thoughts, review Chapter 1, Empowerment. Your goal is to improve your test performance. Identifying your knowledge deficits and information-processing errors should provide a focus for corrective action. This places you in a position of control, which is essential if you are to be successful.

Two tools are presented in this chapter to analyze questions that you answer incorrectly. The first tool, **Information-Processing Analysis**, focuses on the “process” of test taking. This tool has two parts: Processing Errors and Personal Performance Trends. It discloses processing errors in relation to the stem of a question and the options in a question. It also addresses trends in your personal performance in relation to time management, concentration, empowerment, decisiveness/indecisiveness, and clusters of errors. It includes a section for comments for you to make notes about your reactions or questions you may want to explore with your instructor. The second tool, **Knowledge Analysis**, focuses on the “content” aspect of a test. It may identify clusters of errors in specific knowledge categories as well as errors in the steps of the nursing process.

This chapter also contains corrective action guides that address each tool. These guides discuss how to correct your identified errors in the “Analysis” tools and direct you to sections in this text that will help you avoid your errors in the future.

INFORMATION-PROCESSING ANALYSIS TOOL

Information-Processing Analysis Tool													
Processing Errors	Question Number												Total
STEM													
Missed word indicating negative polarity													
Missed word setting a priority													
Missed key words that direct attention to content													
Misinterpreted information presented													
Missed the central point/theme													
Missed the central person													
Read into the question													
Missed the step in the nursing process (NP)													
Incompletely analyzed the stem; read it too quickly													
Did not understand what the question was asking													
Did not know or did not remember the content associated with the question													
OPTIONS													
Answered quickly without reading all the options													
Failed to respond to negative polarity in stem													
Misidentified the priority													
Misinterpreted information													
Read into option													
Did not know or did not remember the content													
Knew content but inaccurately applied concepts and principles													
Knew the right answer but recorded it inaccurately													
Personal Performance Trends	Comments												
1. I finished the exam with time to review YES { } NO { }													
2. I was able to focus with little distraction YES { } NO { }													
3. I felt calm and in control YES { } NO { }													
4. When I changed answers, I got more questions right rather than wrong YES { } NO { }													
5. Identify error clusters: a. First third of exam { } b. Middle third of exam { } c. Last third of exam { } d. "Runs" of errors { } e. No clusters identified { }													

Complete the Processing Errors portion of the Information-Processing Analysis Tool in the following way:

- Review a question you got wrong and determine which processing error caused you to answer the question incorrectly.
- Place the number of the question in the first box to the right of the identified processing error on the tool.
- If you cannot decide between two processing errors or more than one error was involved, put the number of the question next to more than one processing error.
- When another question you got wrong has the same processing error, place the number of the subsequent question in the box to the right of the number of the previous question.
- Insert the number of every question you got wrong on the test into the Processing Errors portion of the Information-Processing Tool.
- Tally the total number of answers you got wrong for each processing error in the last column on the right. Students often will notice a clustering of errors in one area or another.

You can individualize this tool to reflect your specific processing error. For example, if you find that you frequently got questions wrong because you “Read into the question,” you could subdivide this area into “Added information from my own mind” and/or “Made assumptions.”

Complete the Personal Performance Trends portion of the Information-Processing Analysis Tool in the following way:

- Answer questions 1, 2, 3, and 4. Identify your answer as either YES or NO by placing a mark in the brackets accompanying the question.
- Divide the number of the questions in the test by 3 to determine how many questions are in the first, middle, and last third of the test.
- Count the number of questions you got wrong in the first third of the test and enter that number in the brackets next to 5.a. Do the same for 5.b. and 5.c.
- Look at the questions you got wrong and identify if 2 or more occur in a row or if 3 or more occur close proximity. Enter the number of “runs” you identify in the brackets next to 5.d.
- Place a mark in the brackets next to 5.e. if no error clusters are identified.

CORRECTIVE ACTION GUIDE FOR THE INFORMATION-PROCESSING ANALYSIS TOOL

This Guide has two parts: one that addresses Processing Errors and the other that addresses Personal Performance Trends. Both of these are included in the Information-Processing Analysis Tool. After you have completed the Processing Errors portion of the Information-Processing Analysis Tool, investigate your results with the *Corrective Action Guide for Information-Processing Analysis: Processing Errors*. This section of the guide has three columns:

- Column 1 lists Processing Errors, which are identical to the Processing Errors in column 1 of the Information-Processing Analysis Tool.
- Column 2 refers you to the chapters and sections in this textbook that address information related to the Processing Errors listed in column 1.
- Column 3 indicates the pages where you can find the information listed in column 2.

This portion of the Guide directs you to information that you can review to correct your information-processing problems. For example, if you have multiple “Xs” in the row related to “Missed the word setting a priority,” you should review the information about “Identify the Word in the Stem That Sets a Priority” that is included in Chapter 7, Test-Taking Techniques. Review the sections in the book included in column 2 for every processing error that you identify that relates to your performance.

The Processing Errors section of the Guide directs you to information that you can review to enhance your ability to examine the stem of a question and explore the options presented to arrive at the correct answer.

Corrective Action Guide for Processing Errors in the Information-Processing Analysis Tool—cont'd		
Processing Errors	Review the Following Sections in this Textbook	Page Number
STEM Missed word indicating negative polarity	Chapter 7 , Test-Taking Techniques (Identify the Word in the Stem That Indicates Negative Polarity)	98
Missed word setting a priority	Chapter 7 , Test-Taking Techniques (Identify the Word in the Stem That Sets a Priority)	99
Missed key words that direct attention to content	Chapter 7 , Test-Taking Techniques (Identify Key Words in the Stem That Direct Attention to Content)	101
Misinterpreted information presented	Chapter 2 , Critical Thinking (Practice Critical Thinking and Apply Critical Thinking to Multiple-Choice Questions)	12 14
Missed the central point/theme	Chapter 2 , Critical Thinking (Practice Critical Thinking and Apply Critical Thinking to Multiple-Choice Questions)	12 14
Missed the central person	Chapter 7 , Test-Taking Techniques (Identify the Central Person in the Question)	102
Read into the question	Chapter 7 , Test-Taking Techniques (Avoid Reading Into the Question) Chapter 2 , Critical Thinking (Avoid Reading Into the Question)	116 15
Missed the step in the nursing process (NP)	Chapter 6 , The Nursing Process (Focus on the step of the nursing process that you misidentified in the knowledge analysis tool)	67–89
Incompletely analyzed the stem	Chapter 7 , Test-Taking Techniques (Avoid Reading into the Question and Identify Key Words in the Stem That Direct Attention to Content) Chapter 2 , Critical Thinking (Apply Critical Thinking to Multiple-Choice Questions)	116 101 14
Did not understand what the question was asking	Chapter 7 , Test-Taking Techniques (Identify Key Words in the Stem That Direct Attention to Content and Avoid Reading Into the Question) Chapter 2 , Critical Thinking (Practice Critical Thinking and Apply Critical Thinking to Multiple-Choice Questions) Chapter 11 , Practice Questions with Answers and Rationales (Study answers and rationales of practice questions)	101 116 12 14 173–411
Did not know or did not remember the content associated with the question	Chapter 4 , Study Techniques (Specific Study Techniques Related to Cognitive Levels of Nursing Questions) Chapter 11 , Practice Questions with Answers and Rationales (Study answers and rationales of practice questions)	41 173–411

Continued

Corrective Action Guide for Processing Errors in the Information-Processing Analysis Tool—cont'd

Processing Errors	Review the Following Sections in this Textbook	Page Number
OPTIONS Answered quickly without reading all the options	Chapter 7 , Test-Taking Techniques (Avoid Reading Into the Question)	116
Failed to respond to negative polarity in the stem	Chapter 7 , Test-Taking Techniques (Identify the Word in the Stem That Indicates Negative Polarity)	98
Misidentified the priority	Chapter 7 , Test-Taking Techniques (Identify the Word in the Stem That Sets a Priority)	99
	Chapter 11 , Practice Questions With Answers and Rationales (Study answers and rationales of practice questions)	173–411
Misinterpreted information	Chapter 2 , Critical Thinking (Practice Critical Thinking and Apply Critical Thinking to Multiple-Choice Questions)	12 14
Read into options	Chapter 7 , Test-Taking Techniques (Avoid Reading Into the Question) Chapter 2 , Critical Thinking (Avoid Reading Into the Question)	116 15
Did not know or did not remember the content	Chapter 4 , Study Techniques (Specific Study Techniques Related to Cognitive Levels of Nursing Questions) Chapter 11 , Practice Questions With Answers and Rationales (Study answers and rationales for practice questions)	41 173–411
Knew content but inaccurately applied concepts and principles	Chapter 2 , Critical Thinking (Apply Critical Thinking to Multiple-Choice Questions) Chapter 11 , Practice Questions With Answers and Rationales (Study answers and rationales for practice questions)	14 173–411
Personal Performance Trends		Comments
1. I finished the exam with time to review YES { } NO { }		
2. I was able to focus with little distraction YES { } NO { }		
3. I felt calm and in control YES { } NO { }		
4. When I changed answers, I got more questions right rather than wrong YES { } NO { }		
5. Identify error clusters: a. First third of exam { } b. Middle third of exam { } c. Last third of exam { } d. "Runs" of errors { } e. No clusters identified { }		

Corrective Action Guide for Personal Performance Trends in the Information-Processing Analysis Tool

The Personal Performance Trends section of the Guide provides a global perspective of your functioning throughout the examination rather than your performance on specific test items. After you have completed the Personal Performance Trends portion of the Information-Processing Analysis Tool, investigate your results with the corrective actions suggested below. This section of the Guide includes issues such as:

Time management (I finished the exam with time to review)

Concentration (I was able to focus with little distraction.)

Empowerment (I felt calm and in control.)

Decisiveness/indecisiveness (When I changed answers, I got the questions right.)

Error clusters (I had no cluster errors; I had error clusters in the first, middle, or last third of an exam or “runs” of error clusters.)

This portion of the Guide focuses on issues that can promote or hinder your performance on an examination. Each personal performance trend statement is accompanied by:

- Comments that specifically relate to the trend being discussed.
- Questions you must ask yourself if you answer NO to statements 1 through 4 or if you identify error clusters in statement 5.
- A Review that refers you to content in the book that explores information related to the personal performance trend being discussed.

1. I FINISHED THE EXAM WITH TIME TO REVIEW

If your answer was YES, you have managed your time well. If your answer was NO, you are not managing your time effectively and you need to identify why you are taking too long to proceed through the test. You must answer the following questions:

- Am I taking too much time to answer each question?
- Am I getting bogged down and spending too much time on a few difficult questions that prevent me from finishing or reviewing the test?
- (Other) Identify your own questions.

Review

Chapter 7, Test-Taking Techniques: Manage the Allotted Time to Your Advantage, page 115.

Chapter 7, Test-Taking Techniques: Concentrate on the Simple Before the Complex, page 116.

2. I WAS ABLE TO FOCUS WITH LITTLE DISTRACTION

If your answer was YES, you have sufficient concentration and the ability to block out distractions. If your answer was NO, you must answer the following questions:

- Am I fatigued before and/or during the test?
- Do distractions in the environment cause me to lose focus?
- Was I physically uncomfortable during the test?
- (Other) Identify your own questions.

Review

Chapter 1, Empowerment: Establish Control Before and During the Test, page 6.

3. I FELT CALM AND IN CONTROL

If your answer was YES, you have anxiety under control and are able to focus on the test rather than having to cope with anxious responses. If your answer was NO, you must answer the following questions:

- Do I experience uncomfortable, fearful responses during exams?
- Do I experience internal mental stressors (negative self-talk) that block my confidence?

- Do I get flustered when confronted with a question that I am unable to answer?
- (Other) Identify your own questions.

Review

Chapter 1, Empowerment: Develop a Positive Mental Attitude, page 1.

Chapter 7, Test-Taking Techniques: Maintain a Positive Mental Attitude, page 117.

4. WHEN I CHANGED ANSWERS I GOT MORE QUESTIONS RIGHT RATHER THAN WRONG

Some examinations, especially those taken on a computer, do not permit a review of previously answered questions. However, others allocate time for a short review at the end of the examination. During review of your answers at the end of an examination you may be tempted to change your original answer to another option that you now believe is the correct answer. It is critical for you to know if you are changing correct answers to wrong answers or wrong answers to correct answers when reviewing questions. If you answered YES to the question, “When I changed answers, I got more questions right rather than wrong” you are able to change answers based on careful review of the stem and options. If you answered NO to the question you must ask yourself the following questions:

- What causes me to change my answers?
- Do I lack confidence when I answer a question?
- Why do I keep changing answers when I know I always change correct answers to wrong answers?
- (Other) Identify your own questions.

Analyze whether changing answers works to your advantage. Every time you review a test, evaluate your accuracy in changing answers. Keep score of how many answers you changed from wrong to right and how many you changed from right to wrong.

If the number of items you changed from wrong to right is greater than the number of items you changed from right to wrong, it probably is to your advantage to change answers you ultimately believe you answered incorrectly. Subsequent questions may have contained content that was helpful in answering a previous question, you may have accessed information you did not remember originally, or you may be better able to assess the question with more objectivity at the end of the test when you personally feel less pressure to finish.

If the number of items you changed from right to wrong is greater than the number of items you changed from wrong to right, you should avoid changing your answers unless you are absolutely positive that your second choice is the correct answer. As the end of an examination approaches, some people tend to experience more anxiety, not less, which interferes with perception and the processing of information. If you tend to change answers to the wrong answer, leave your eraser home or sit on your hands so that you do not change the answer!

When considering changing an answer to a previously answered question, use test-taking techniques to increase your ability to focus on what the question is asking and eliminate distractors. A careful review may dissect the question into its component parts, thereby revealing a key word or clue that assists you to reconsider your previous answer.

Review

Chapter 7, Test-Taking Techniques, page 97.

Chapter 8, Testing formats Other Than Multiple-Choice Questions, page 125.

Chapter 11, Practice Questions With Answers and Rationales (Most questions contain test-taking tips), pages 173–411.

5. IDENTIFY ERROR CLUSTERS

The purpose of identifying error clusters is to determine if anxiety or fatigue is affecting your performance. If you identify a group of errors at the beginning, middle, or end of an examination or you identify “runs” of incorrect answers (two or more incorrect

answers in a row or three or more in close proximity) you need to analyze what is happening. You must ask yourself the following questions:

- Do I get anxious before or during the exam?
- Do I get tired?
- Do I get flustered when confronted with a difficult question?
- Do I lose my ability to concentrate?
- (Other) Identify your own questions.

Review

Errors that occur in the first third of an exam: If your errors occur in the beginning of an exam, you may want to use techniques that allow you to control the testing environment or use anxiety reduction techniques just before the exam begins to feel more in control and therefore less anxious.

Chapter 1, Empowerment: Establish Control Before and During the Test, page 6.

Chapter 1, Empowerment: Develop a Positive Mental Attitude, page 1.

Errors that occur in the middle third of an exam or in clusters throughout an exam: If you find that errors occur in the middle third of the exam or runs of error clusters occur after every 20 or 30 questions, you may need to reduce tension and anxiety. We counselled a graduate nurse who did not pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN) after two attempts. When assessing her performance on a practice examination, we identified the fact that every 30 minutes she made four or five errors in a row. We encouraged her to take a break every 25 minutes until she completed the examination. On her next attempt, she passed the NCLEX-RN. A break every 25 minutes was the key change in her approach to the NCLEX-RN. In the classroom setting, this may be impossible; therefore, you should engage in a relaxation technique that works for you for 2 or 3 minutes. In addition you can visualize a person who supports you emotionally standing beside you and giving you encouragement during the examination or use positive self-talk by saying, "I can do this," or "I studied hard for this exam." Remember, relaxation techniques must be practiced to be effective and should be conducted in a simulated testing situation before a real testing situation. Recognize that if you implement relaxation techniques during a test, you must adjust the time you allot for each question and your review.

Chapter 1, Empowerment: Challenge Negative Thoughts, page 2.

Chapter 1, Empowerment: Use Controlled Breathing (Diaphragmatic Breathing), page 2.

Chapter 1, Empowerment: Perform Muscle Relaxation, page 4.

Chapter 1, Empowerment: Use Imagery, page 5.

Errors that occur in the last third of an exam: If you find that the majority of your errors occur during the last third of an exam, you may need to practice increasing your test-taking stamina by practicing test taking for longer periods of time. Stamina also can be increased by practicing test taking in a simulated testing environment.

Chapter 1, Empowerment: Exercise Regularly, page 6.

Chapter 4, Study Techniques: Simulate a Testing Environment, page 38.

Chapter 4, Study Techniques: Practice Test Taking, page 49.

KNOWLEDGE ANALYSIS TOOL

The Knowledge Analysis Tool has two parts: Knowledge Categories and Nursing Process. Knowledge categories include the range of basic information that is the foundation of nursing practice. The Nursing Process section of the tool includes the steps of the nursing process: assessment, analysis, planning, implementation and evaluation. The nursing process provides a systematic approach to the delivery of nursing care.

Knowledge Analysis Tool																									
Knowledge Categories	Question Number																								
Legal/ethical issues																									
Health-care delivery systems																									
Basic human needs																									
Growth and development																									
Communication																									
Emotional needs																									
Physical assessment																									
Physical safety																									
Mobility																									
Hygiene																									
Pain and comfort																									
Rest and sleep																									
Nutrition																									
Fluid and electrolytes																									
Urinary elimination																									
Bowel elimination																									
Oxygen																									
Microbiological safety																									
Administration of medications																									
Pharmacology																									
Perioperative																									
Community setting																									
Pathophysiology																									
Anatomy and physiology																									
Computations																									
Nursing Process																									
Assessment																									
Analysis																									
Planning																									
Implementation																									
Evaluation																									

Complete the Knowledge Categories portion of the Knowledge Analysis Tool in the following way:

- Review a question you got wrong and determine which knowledge category best represents the content being tested in the question.
- Place the number of the question in the first box to the right of the identified knowledge category on the tool.
- If you cannot decide between two knowledge categories, put the number of the question next to more than one knowledge category.
- When another question you got wrong has the same knowledge category, place the number of the subsequent question in the box to the right of the previous question.
- Insert the number of every question you got wrong on the test into the Knowledge Categories portion of the Knowledge Analysis Tool.
- Tally the total number of answers you got wrong for each knowledge category in the last column on the right. Students often will notice a clustering of errors in one or more category.

If you find that you got many questions wrong in one of the categories, you may identify subdivisions to the category. For example, if you got many questions wrong in the area of perioperative nursing, you could subdivide this area into “Preoperative,” “Intraoperative,” and “Postoperative.”

Complete the Nursing Process portion of the Knowledge Analysis Tool in the following way:

- Review a question you got wrong and determine which step of the nursing process best represents the content being tested in the question. Identify just one step of the nursing process for each question you got wrong.
- Place the number of the question in the first box to the right of the step in the nursing process you identified.
- When another question you got wrong reflects the same step of the nursing process, place the number of the subsequent question in the box to the right of the previous question.
- Insert the number of every question you got wrong on the test into the Nursing Process portion of the Knowledge Analysis Tool.
- Tally the total number of answers you got wrong for each step of the nursing process in the last column on the right. Students often will notice a clustering of errors in one or two steps of the nursing process.

CORRECTIVE ACTION GUIDE FOR THE KNOWLEDGE ANALYSIS TOOL

This Guide has two parts: Knowledge Categories and Nursing Process. Knowledge Categories include the broad areas of information that form the basics of nursing practice. Evaluating your performance using this section of the tool will help identify your gaps in knowledge. The Nursing Process portion of the tool reflects the steps of the nursing process: assessment, analysis, planning, implementation, and evaluation. Exploring your performance using this section of the tool will help identify your difficulties in performing critical thinking and problem-solving behaviors within the practice of nursing. Remember, the nursing process is a systematic approach that uses critical thinking to provide nursing care.

Corrective Action Guide for the Knowledge Categories in the Knowledge Analysis Tool

First, complete the Knowledge Categories portion of the Knowledge Analysis Tool. Then, identify the knowledge categories that have question numbers indicating answers that are incorrect. The more wrong answers within a category, the less knowledge you have of the content within the category. The more categories in which you have wrong answers the broader your lack of nursing knowledge. The related nursing content for each wrong answer should be explored. However, when time is limited, focus on those knowledge areas with the most wrong answers.

Studying is essential to learning, which is a complex activity. Most people study before a test. However, it is essential also to study after a test. When you identify a practice question that you answered incorrectly, reread your class notes and textbook regarding that topic. Discuss it with your instructor if you still do not understand the content. When you have a thorough understanding of the content being tested you will be better able to identify the correct answer. In addition, you will have more confidence in the option you select and be less likely to change your answer later during the examination.

One of the best ways to achieve a higher grade on a test is to be overprepared. Compare and contrast class notes with information within your textbook. Study in a small group with your peers to obtain different perspectives on material in a specific knowledge category or when analyzing a test item. Practice the questions in Chapter 11 and review the rationales for the correct and incorrect answers. Understanding complex concepts usually requires a variety of study approaches and repetition.

Review

Chapter 4, General Study Techniques, page 37.

Chapter 4, Specific Study Techniques Related to Cognitive Levels of Nursing Questions, page 41.

Chapter 1, Empowerment: Overprepare for a Test, page 5.

Chapter 11, Practice Questions with Answers and Rationales, pages 173–411.

Corrective Action Guide for the Nursing Process in the Knowledge Analysis Tool

First, complete the Nursing Process portion of the Knowledge Analysis Tool. Then, identify the steps of the nursing process that have question numbers indicating answers that are incorrect. The more wrong answers within a particular step of the nursing process, the more significant your difficulties will be in answering questions that require the typical thinking behaviors associated with that step. For example, assessment questions may require you to collect or analyze data, whereas planning questions may require you to set goals or identify priorities.

Read the stem and each option carefully when taking a simulated practice examination. Determine which step of the nursing process is reflected by the question before even attempting to answer the question. When you are able to identify the question's placement within the nursing process it will provide a focus for a more in-depth review of the stem and options. It should facilitate your identification of what the test item is asking.

Review

Chapter 2, Critical Thinking, page 9.

Chapter 6, The Nursing Process, page 67.

SUMMARY

You should use these test-analysis tools to assess your test performance after taking a practice examination. Then you should use these tools when reviewing every examination you take in class. Do not be shy in asking your instructor for help with your analysis. Nursing instructors who are student centered will help you with this analysis during class or office hours because instructors have a vested interest in your success. Analysis of your test performance is essential if you are to identify your own individual learning needs. After your learning needs are identified using the presented tools, the Corrective Action Guides should direct you to information that can improve your abilities. Engaging in activities that analyze your test performance is time well spent!

