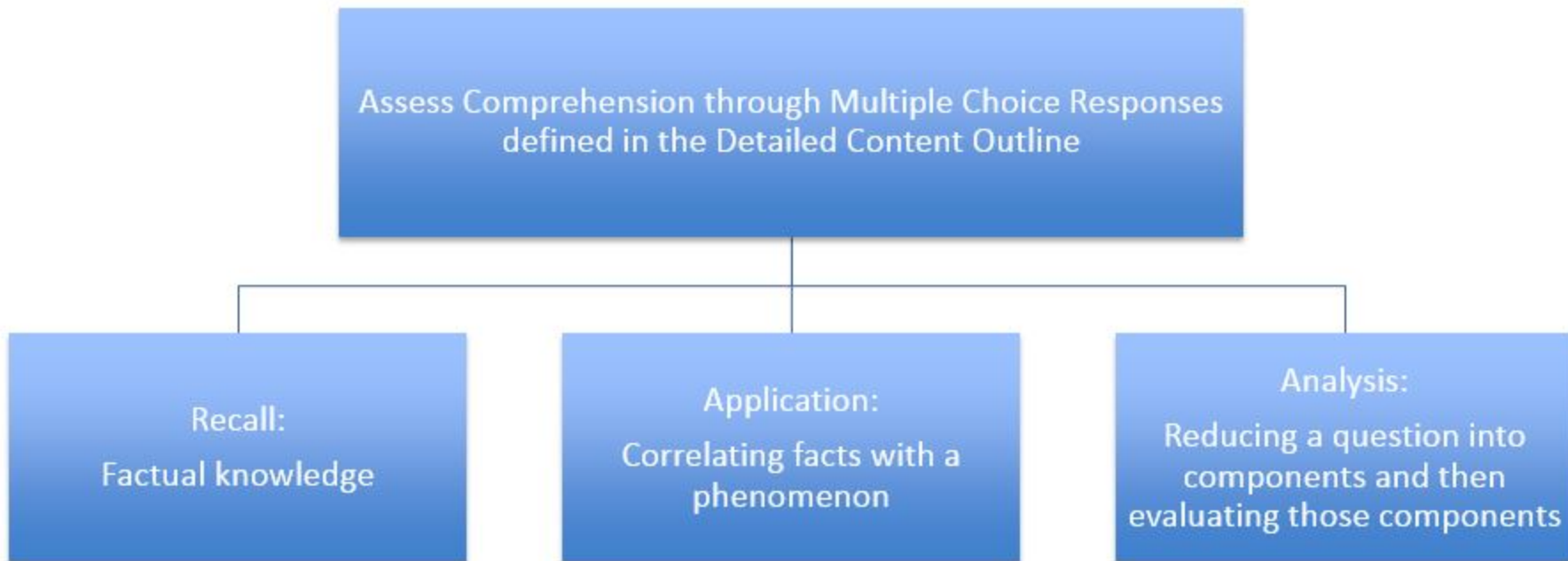


Authoring Items by each Exam Committee: WTA, Foot Care, WOC, WOC-AP

Building and Referencing the Question and Response –
One Item at a Time



Recall: Body Mass Index = Kg/M^2

Application: The **MOST** important priority for a first time ostomate is

Analysis: A diabetic foot ulcer with blue discoloration has malodor and no pulse. The **FIRST** order of business is to

Candidates are allowed 3 points per accepted item, up to 15 points per specialty (wound, ostomy, continence, or foot care).

Items are approved by the exam committee chair or board liaison.

Each item submitted will be in multiple-choice format and include the following components:

- The stem –the question
- The key - the correct response or best answer
- 3 distracters - the incorrect responses

To be approved, items must meet the following criteria:

- Avoid overly general content. Each item should be focused on a specific content area.
 - This content area is based on the detailed content outlines, available at <http://www.wocncb.org/become-certified/test-preparation/exam-content-outline.php>
- The stem should be meaningful and present a definite problem.
 - The phrase that introduces the item (stem) should clearly state the problem. It should be free of irrelevant material, avoid excessive verbiage, and focus the test-taker directly on the tested information.
 - It can be a
 - Direct question (“Which of the following is a moist wound dressing?”)
 - An incomplete sentence (“Moist wound dressings include:”) or
 - In a best answer format (“Which of the following contribute MOST to moist wound healing?”)
- If a scenario is used, provide sufficient information for the candidate to determine the correct answer and use brief sentences without unnecessary details.
- Avoid negative wording in the stem such as NOT, EXCEPT, or LEAST LIKELY.
 - This forces the candidate to take an extra cognitive step in the consideration of each response and may be an indication of test taking skills rather than knowledge of the content.
- Avoid using terms like ALWAYS or NEVER.
- Distracters should be:
 - Plausible
 - Similar in:
 - Length
 - Complexity
 - Vocabulary
 - Grammatical construction.
- Do not use ALL OF THE ABOVE or NONE OF THE ABOVE.

- All responses should be grammatically consistent with the stem. Candidates can easily eliminate inconsistent items as the incorrect answer.
- Assign a complexity level (cognitive domain) to each item submitted. Cognitive domains are:
 - Recall: The ability to recall or recognize specific information
 - Example*
“The most likely etiology of a lower extremity ulcer with edema and hemosiderin staining of the skin around the ulcer is
A. Arterial insufficiency.
B. Mixed arterial-venous disease.
C. Neuropathic disease.
D. Venous insufficiency.”
 - Application: The ability to comprehend, relate or apply knowledge to new or changing situations
 - Example*
“The most appropriate initial treatment of a draining lower extremity venous ulcer is
A. Support stockings.
B. Layered compression bandages.
C. Antibiotic therapy.
D. Antiembolism stockings.”
 - Analysis: The ability to analyze and synthesize information, determine solutions, or to evaluate the usefulness of a solution.
 - Example*
“An ambulatory patient with a lower extremity ulcer has edema, copious serous drainage, and an ankle- brachial index of 1.0. The most appropriate treatment of this ulcer would be
A. A hydrocolloid dressing and a dynamic compression device.
B. A silver-impregnated alginate dressing and support stockings.
C. A non-elastic paste wrap (Unna’s boot) and a self-adherent compression wrap.
D. An absorbent gauze wrap and an orthotic compression device.”
- Appropriate reference materials would be textbooks used by accredited Wound, Ostomy, Continence Nurse Education Programs and foot care education programs. Other texts and published journals are acceptable as long as they are evidence-based and/or peer reviewed. Be sure to provide a complete reference including a page number.

Examples of Reference Formatting using APA Guidelines:

Periodical:

Author, A. A., Author, B.B., & Author, C.C. (2012). Title of article. Title of Periodical, issue, pages.

Book:

Author, A.A. (2012) Title of work. Location: Publisher.

Online Periodical:

Author, A. A., Author, B.B., & Author, C.C. (2012). Title of article. Title of Periodical, issue, pages. Retrieved month day, year, URL.

Chapter in an edited book:

Author, A.A., (2012) Title of chapter. In Author, B.B. (ed.), Book title (pp. xxx-xxx). Location: Publisher.

Above information adapted from the following references:

<http://ctl.utexas.edu/assets/Evaluation--Assessment/Writing-Good-Multiple-Choice-Exams-04-28-10.pdf> Retrieved 5/14/2012

<http://testing.byu.edu/info/handbooks/betteritems.pdf> Retrieved 5/14/2012

Technical Guidelines: Castle's Technical Guidelines for the Construction of Multiple-Choice Questions (January 2009)

*Fellows, J. (2008) Understanding Question Types on Certification Examinations. JWOCN. 35(6), 622-24.

American Psychological Association. (2001) Publication Manual of the APA. Washington DC: American Psychological Association.

Candidates are allowed 3 points per accepted item, up to 15 points per specialty (wound, ostomy, continence, or foot care).

Items are approved by the exam committee chair or board liaison.

Each item submitted will be in multiple-choice format and include the following components:

- The stem –the question
- The key - the correct response or best answer
- 3 distracters - the incorrect responses

To be approved, items must meet the following criteria:

- Avoid overly general content. Each item should be focused on a specific content area.
 - This content area is based on the detailed content outlines, available at <http://www.wocncb.org/become-certified/test-preparation/exam-content-outline.php>
- The stem should be meaningful and present a definite problem.
 - The phrase that introduces the item (stem) should clearly state the problem. It should be free of irrelevant material, avoid excessive verbiage, and focus the test-taker directly on the tested information.
 - It can be a
 - Direct question (“Which of the following is a moist wound dressing?”)
 - An incomplete sentence (“Moist wound dressings include:”) or
 - In a best answer format (“Which of the following contribute MOST to moist wound healing?”)
- If a scenario is used, provide sufficient information for the candidate to determine the correct answer and use brief sentences without unnecessary details.
- Avoid negative wording in the stem such as NOT, EXCEPT, or LEAST LIKELY.
 - This forces the candidate to take an extra cognitive step in the consideration of each response and may be an indication of test taking skills rather than knowledge of the content.
- Avoid using terms like ALWAYS or NEVER.
- Distracters should be:
 - Plausible
 - Similar in:
 - Length
 - Complexity
 - Vocabulary
 - Grammatical construction.
- Do not use ALL OF THE ABOVE or NONE OF THE ABOVE.

- All responses should be grammatically consistent with the stem. Candidates can easily eliminate inconsistent items as the incorrect answer.
- Assign a complexity level (cognitive domain) to each item submitted. Cognitive domains are:
 - Recall: The ability to recall or recognize specific information
 - Example*
“The most likely etiology of a lower extremity ulcer with edema and hemosiderin staining of the skin around the ulcer is
A. Arterial insufficiency.
B. Mixed arterial-venous disease.
C. Neuropathic disease.
D. Venous insufficiency.”
 - Application: The ability to comprehend, relate or apply knowledge to new or changing situations
 - Example*
“The most appropriate initial treatment of a draining lower extremity venous ulcer is
A. Support stockings.
B. Layered compression bandages.
C. Antibiotic therapy.
D. Antiembolism stockings.”
 - Analysis: The ability to analyze and synthesize information, determine solutions, or to evaluate the usefulness of a solution.
 - Example*
“An ambulatory patient with a lower extremity ulcer has edema, copious serous drainage, and an ankle- brachial index of 1.0. The most appropriate treatment of this ulcer would be
A. A hydrocolloid dressing and a dynamic compression device.
B. A silver-impregnated alginate dressing and support stockings.
C. A non-elastic paste wrap (Unna’s boot) and a self-adherent compression wrap.
D. An absorbent gauze wrap and an orthotic compression device.”
- Appropriate reference materials would be textbooks used by accredited Wound, Ostomy, Continence Nurse Education Programs and foot care education programs. Other texts and published journals are acceptable as long as they are evidence-based and/or peer reviewed. Be sure to provide a complete reference including a page number.

Examples of Reference Formatting using APA Guidelines:

Periodical:

Author, A. A., Author, B.B., & Author, C.C. (2012). Title of article. Title of Periodical, issue, pages.

Book:

Author, A.A. (2012) Title of work. Location: Publisher.

Online Periodical:

Author, A. A., Author, B.B., & Author, C.C. (2012). Title of article. Title of Periodical, issue, pages. Retrieved month day, year, URL.

Chapter in an edited book:

Author, A.A., (2012) Title of chapter. In Author, B.B. (ed.), Book title (pp. xxx-xxx). Location: Publisher.

Above information adapted from the following references:

<http://ctl.utexas.edu/assets/Evaluation--Assessment/Writing-Good-Multiple-Choice-Exams-04-28-10.pdf> Retrieved 5/14/2012

<http://testing.byu.edu/info/handbooks/betteritems.pdf> Retrieved 5/14/2012

Technical Guidelines: Castle's Technical Guidelines for the Construction of Multiple-Choice Questions (January 2009)

*Fellows, J. (2008) Understanding Question Types on Certification Examinations. JWOCN. 35(6), 622-24.

American Psychological Association. (2001) Publication Manual of the APA. Washington DC: American Psychological Association.