



Academic Workshop
Webinar Series Part 2:
Item Writing

Presenters

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Workshop Objectives

At the end of the REx-PN Academic Workshop webinar, the participant will be able to:

Explain the steps of the item development process

Identify REx-PN item types

Apply principles of item writing using REx-PN style to enhance item writing skills

Explain how to access available REx-PN publications and educational resources

RExPN Item Development

Item Development - Roles

- Create the questions or “items” that are used on the REx-PN

- Examine the items that are created by Item Writers

Item Development - Item Writers

- Current, nursing license
- Current employment position of faculty

Item Development – Item Reviewers

- Current, nursing license
- Current employment consists

Foundations of Item Writing

Item Terminology

STEMThe nurse is preparing a staff education program about myasthenia gravis. Which of the following should the nurse include as a treatment used for an exacerbation of myasthenia gravis?

RESPONSE OPTIONS

- | | |
|---------------------|--------------------------|
| (A) thyroidectomy | <u>DISTRACTOR</u> |
| (B) plasmapheresis | <u>KEY</u> |
| (C) chemotherapy | <u>DISTRACTOR</u> |
| (D) bisphosphonates | <u>DISTRACTOR</u> |

REx-PN Items Must Be

Linked to the
test plan

Suitable for
entry-level
practice

Accurate

Only one correct
answer

*Unless multiple
response*

Item Construction Principles

- Clear item intent or objective
- Central idea identified in the stem
- Relevant and pertinent information provided
- Readability of item:

Information provided is concise; can be read and processed within a short amount of time

REx-PN Item Language Principles

- Language selected for items must be universal
a

Distractor Design

- Three distractors for each item
 - Unless multiple response item type
- Grammatically matches the stem
- Options are parallel and independent
- Avoid opposites
- Avoid “All of Above” or “None of Above”
- Key and/or distractors are not conspicuous

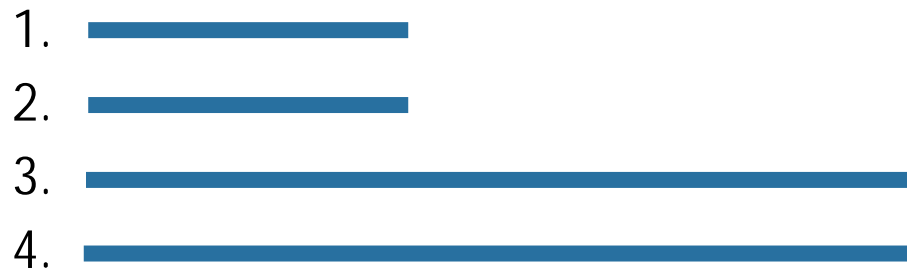
Parallel Length of Responses

All options have similar text lengths

OR

Two pairs that are similar in length

1 & 2 are equal, 3 & 4 are equal



RExPN Review Processes and RExPN Style

Editorial Review

- Clarity
- Grammar
- Punctuation
- Spelling
- Style

RExPN Style Principles

- Slang or idioms that may be confusing
- Words that may not be familiar to all groups
- All brand names
- Classifying clients by age or diagnosis
- Gender unless necessary to answer an item
- Negatively worded stems

REx-PN Style Principles

RExPN
Preferred
Usage

Generic rather than trade names

Client rather than patient

Nurse rather than you

Unregulated Care Provider (UCP) rather than
nurse aide/technician

REx-PN Item Assumptions

In the RExPN examination, it is assumed unless otherwise specified:

- Adult client
 - *Age or developmental stage will only be included when it is required to answer the item (pediatric clients, older adult)*
- Nurse has an order to carry out an intervention

Sensitivity Criteria

- Stereotypes
- Assumptions
- Ethnocentrism and Elitism
- Inflammatory material
- Language
- Gender

Example Item - Revised

The nurse is caring for a client who is taking a newly prescribed ace inhibitor medication. Which of the following foods should the client avoid while taking this medication? **Select all that apply.**

1. coffee
2. apples
3. oranges
4. bananas
5. salt-substitutes

Example Item

You are observing a travel nurse who is caring for an adult male

Example Item - Revised

The nurse is observing a co-worker who is caring for a client who has ordered continuous enteral tube feedings. Which of the following actions by the co-worker would require the nurse

RE_xPN Item Types

Standard and Alternate Item Formats

- **Standard Format**— multiple-choice items with four answer options and one answer key
-

Alternate Item Types

-

Multiple Response

- Looks similar to a multiple-choice item but has five or six response options and could have more than one correct answer
- Instructions = **Select all that apply**
- No partial credit given

Sample Multiple Response

The nurse is preparing to admit a client who has acute pulmonary tuberculosis (TB). Which of the following infection control precautions should the nurse implement? **Select all that apply.**

1. Wear non-sterile gloves.
2. Wear a protective gown.
3. Wear a particulate respirator mask.*
4. Ensure client's meals are served on disposable dishes.
5. Place a surgical mask on the client when being transported.*

Fill-in-the-Blank Calculations

- Asks the graduate to perform a calculation

Sample Fill-in-the-Blank Calculation

The nurse is caring for a client who is receiving prescribed ampicillin 1 gram, IV, in 50 ml of 5% dextrose in water, every 6 hours. How many ml/hr should the nurse set on the infusion pump to deliver the medication over 20 minutes? Record your answer using a whole number.

Answer: 150 ml/hr

Exhibit

- Graduate is presented with a client scenario and exhibits (3)
- Graduate must click on each exhibit tab to view additional information
- Instructions = **Click the exhibit button for additional information**

Sample Exhibit

The nurse is caring for a client who is reporting feeling anxious. Which of the following actions should the nurse take? Click on the exhibit button for additional client information.

1. Instruct the client to breathe into a paper bag.*
2. Perform an electrocardiogram (ECG) for the client.
3. Administer oxygen via a nasal cannula.
4. Request an order for an opioid analgesic to be administered p.r.n.

Vital Signs Exhibit Tab

Temperature	37.2° C
Pulse	105
Respirations	28
Blood pressure	100/80 mm Hg

Progress Notes Exhibit Tab

Client reports feeling anxious and light-headed.

Laboratory Results Exhibit Tab

Laboratory Test	Client Value
Arterial blood gas (ABG)	
pH	7.5
PaO ₂	85 mm Hg
PaCO ₂	30 mm Hg
HCO ₃	25 mmol/L

Graphic

- Graduate will be presented with images
- Images can be in the stem or response options

Sample Graphic Item

The nurse is planning care for a client who has the skin wound shown below. Which of the following interventions should the nurse include in the client's plan of care?

1. Irrigate the wound with mechanical flushing.*
2. Massage the wound

Item Writing Practice

Steps in Item Writing

1. Select a nursing concept.
 - Activity statement from Test Plan
2. Look up in references.
3. Write the stem.
4. Write the key.
5. Write the distractors.
6. Review the item.

Developing an Item Stem

- A complete item stem should include:
 1. Scenario
 2. Client condition and descriptors
 3. Information requested (question)
 4. Additional directions (if needed)
- A stem can be either open-ended or closed

Stem Examples

The nurse is caring for a client who has (client condition).

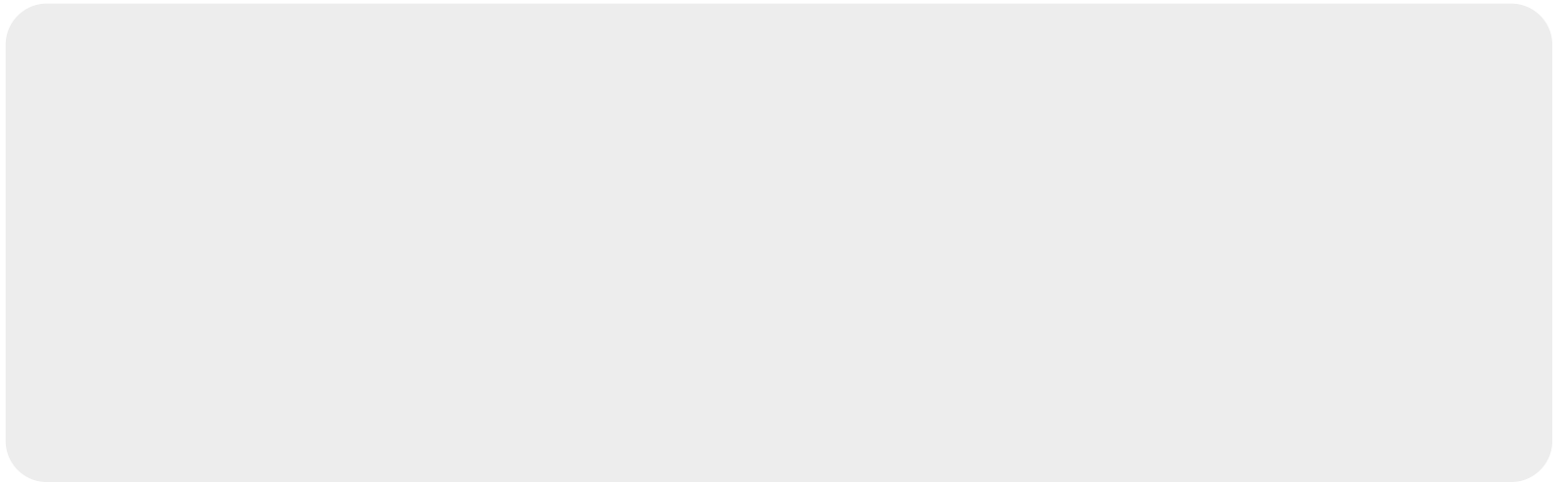


Stem Examples

The nurse is teaching the client who has had (client procedure). Which of the following statements by the client indicates a correct understanding of the teaching?

The nurse is teaching a client about (client condition). Which of the following information should the nurse include?

Let's Write a Multiple-Choice Item

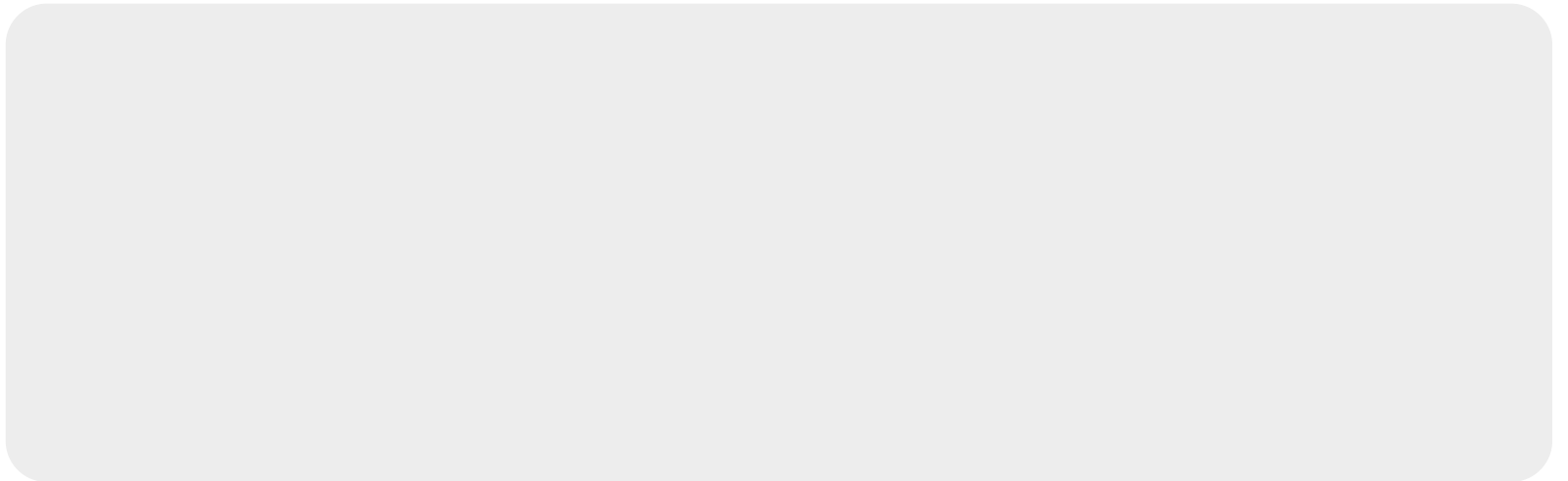


Sample Multiple-Choice Item

The nurse is caring for a client who had a cardiac catheterization 3 hours ago. Which of the following findings is essential

Let's Write a Multiple-Choice Item

Higher Order



Converting Good Items to Higher Order Items

- Integrate two or more concepts into an item
- Use options that are close in content
- Distractors reflect common misconceptions
- Incorporate prioritization, such as multi-client scenarios
- Require interpretation rather than recall

Sample Multiple-Choice Item

Higher Order

The nurse is caring for a client with a Clostridium Difficile infection. Which of the following infection control precautions should the nurse implement?

1. Hand hygiene and gloves
2. Hand hygiene, gloves and protective gown *
3. Hand hygiene, protective gown and face shield
4. Hand hygiene, head covering, mask and gloves

RExPN Resources

REx-PN Web Resources

REx-PN Test Plan

REx-PN Practice Analysis

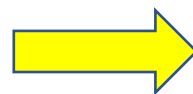
REx-PN CAT Recording

REx-PN FAQs

NCSBN Learning Extension

- Test Development and Item Writing
- Assessment of Critical Thinking

<https://www.ncsbn.org/rex-pn.htm>



Summary

- Item development process consists of several detailed steps that are all equally important
- REx-PN exam consists of both standard and alternate item types
- Specific style principles of item writing exist to develop higher order items
- REx-PN educational resources and publications are available

RExPN Webinar
Series Part 3

October 19, 2020 3:00-4:00 pm

