Academic Workshop Wehinar 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



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
- (B) plasmapheresis
- (C) chemotherapy
- (D) bisphosphonates

DISTRACTOR KEY DISTRACTOR DISTRACTOR

REx-PN Items Must Be



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 3l2n4 204.888 D urC•Re

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 aRdEx PN 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

Genericrather than trade names

Clientrather than patient

RExPN Preferred Usage

Nurserather than you

Unregulated Care Provider (UCra) her 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

RExPN Item Types

Standard and Alternate Item Formats

 Standard Formate multiple-choice items with four answer options and one answer key

Alternate Item Types

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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 = Sele¢ 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 TestClient ValueArterial blood gas (ABG)7.5pH7.5PaO285 mm HgPaCO230 mm HgHCO325 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

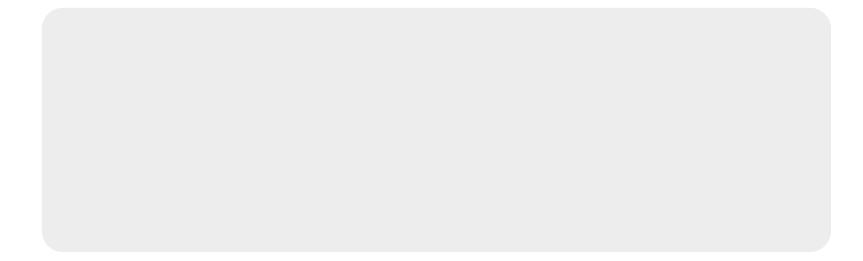
The nurse is caring for a client who has (client condition).

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, 20203:00-4:00 pm