A photograph of two young women, likely nursing students, sitting at a computer workstation. The woman on the left is smiling and looking at the screen, wearing a black top and a yellow and green patterned scarf. The woman on the right is looking at the screen, wearing a light blue top. Their hands are on the keyboard. The background is a plain, light-colored wall.

How to Ensure
NCLEX[®] Success for
Canadian Nursing
Students

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Nurse Educator



**The NCLEX-RN[®] Exam
Coming to Canada in 2015**

What is the NCLEX?

- To ensure public protection, a candidate for licensure must pass an examination that measures the competencies needed to perform safely and effectively as a newly licensed, entry-level nurse.
- This exam is administered by NCSBN, an organization with a proven track-record of developing and administering computerized adaptive exams successfully (www.ncsbn.org).

Client Needs

Client Needs	Percentage of Items from Each Category/Subcategory
Safe and Effective Care Environment	
■ Management of Care	17-23%
■ Safety and Infection Control	9-15%
Health Promotion and Maintenance	6-12%
Psychosocial Integrity	6-12%
Physiological Integrity	
■ Basic Care and Comfort	6-12%
■ Pharmacological and Parenteral Therapies	12-18%
■ Reduction of Risk Potential	9-15%
■ Physiological Adaptation	11-17%

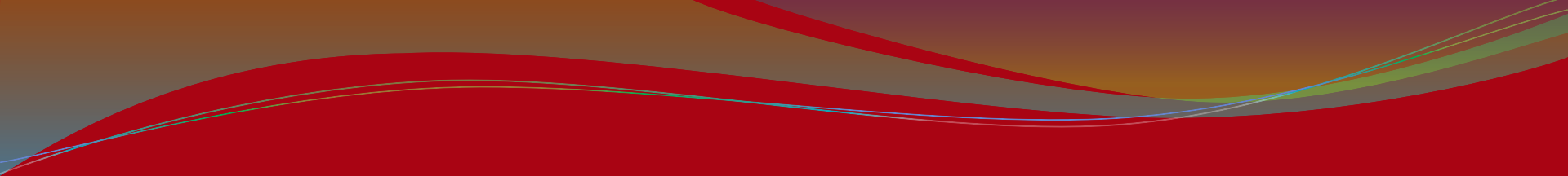
Safe and Effective Care Management

• **Management of Care**

- providing and directing nursing care that enhances the care delivery setting to protect clients and health care personnel

Related content includes but is not limited to:

- Advance Directives
- Continuity of Care
- Advocacy
- Establishing Priorities
- Assignment, Delegation and Supervision
- Ethical Practice
- Case Management
- Informed Consent
- Referrals
- Client Rights
- Information Technology
- Collaboration with Interdisciplinary Team
- Legal Rights and Responsibilities
- Concepts of Management
- Performance Improvement (Quality Improvement)
- Confidentiality/Information Security



What is Computerized Adaptive Testing and/or Quizzing?

Adaptive Testing

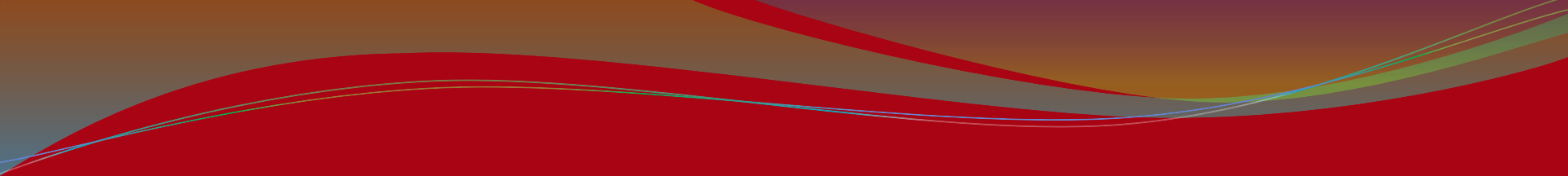
- What is it?
 - Every time you answer an item, the computer re-estimates your ability based on all the previous answers and the difficulty of those items.

- The computer then selects the next item that you should have a 50% chance of answering correctly
 - This way, the next item should not be too easy or too hard.
 - The computer's goal is to get as much information as possible about your true ability level.
 - You should find each item challenging as each item is targeted to your ability

- 
- With each item answered, the computer's estimate of your ability becomes more precise.

Why Computerized Adaptive Testing (CAT) is Used for NCLEX?

- Reduces the number of “easy” items that high-ability candidates receive;
 - “easy” items tell little about a high performing candidate’s ability
- Reduces the number of “difficult” items low-ability candidates receive;
 - candidates tend to guess on items that are too difficult which can skew results
- Reduces item exposure and subsequent security risks
- Improves precision of measurement of the NCLEX candidates ability related to nursing
- Provides a valid and reliable measurement of nursing competence



How does the NCLEX determine
who passes?

Pass/Fail Rules

- The computer decides whether you passed or failed the NCLEX using one of three rules:
 - **95% Confidence Interval Rule**
 - **Maximum-Length Exam Rule**
 - **Run-out-of-time (R.O.O.T.) Rule**

Bottom Line

- If you answer 50% of the easier questions correctly, you fail
- If you answer 50% of the difficult questions correctly, you pass

Prepare Students

“We need to ensure Canadian students practice taking computer adaptive tests.” —

Considerations Regarding the NCLEX-RN for Nurse Educators in Canada, CASN, 2012

“...evaluative measures should be used not only to evaluate student achievement, but, as importantly, to support student learning, and evaluate and improve teaching and program effectiveness.” — [The Fair Testing Imperative in Nursing Education, NLN 2012](#)





What do the questions look like on
the NCLEX?

Alternative Item Format

- Multiple-response
- Fill-in-the-blank
- Hot spot
- Chart/exhibit
- Ordered Response
- Audio item
- Graphic Options

Any item formats, including standard multiple-choice items, may include multimedia, charts, tables or graphic images.

Multiple-response

1. The RICE acronym is helpful for remembering treatment interventions for musculoskeletal injuries. Which of the following are components of the RICE acronym? Select all that apply.
 - a. Rest
 - b. Compression
 - c. Evaluation
 - d. Ice
 - e. Elevation
 - f. Corticosteroids

Fill-in-the-blank

A client is prescribed metaproterenol 20 mg four times each day. How many mg of metaproterenol does the client take each day? Enter the correct number ONLY.

 mg

<input data-bbox="54 686 517 725" type="text"/>			
BS	CE	CA	
1	2	3	+
4	5	6	-
7	8	9	*
0	.	=	/

Chart/Exhibit

Physician Orders

- D5LR at 150 mL/hr
- Vancomycin 1 g IV every 12 hours
- Acetaminophen (Tylenol) 650 mg by mouth q4h pm temperature greater than 101 degrees F
- Blood cultures x 2 15 minutes apart stat

A client has the following vital signs: temperature 101.4 degrees F, blood pressure 88/54, pulse 128 beats/minute, and respirations 34 breaths/minute. Physician orders are shown in the accompanying chart. The nurse first intervenes by

- a) Increasing D5LR to the prescribed rate
- b) Administering the Vancomycin
- c) Providing acetaminophen for the elevated temperature
- d) Obtaining the blood cultures

Ordered Response

Question: A client with diabetes is in the emergency department because of vomiting, diarrhea, and weight loss of 8 pounds over 2 days. Vital signs taken by the triage nurse indicate the client is in hypovolemic shock. Place the nurse's steps in the correct order.

1 Collect a stool specimen for culture.

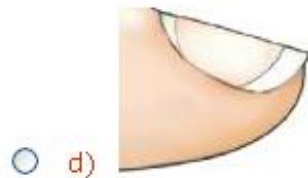
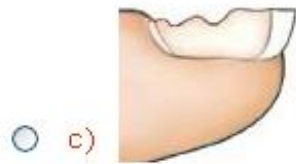
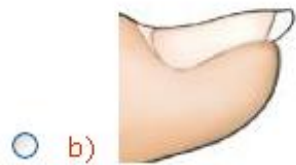
2 Assess the capillary blood glucose level.

3 Place the client in the modified Trendelenburg position.

4 Initiate an intravenous (IV) site and prescribed IV fluids.

Graphic Options

A nurse is assessing a patient's nails and observes Beau's lines. Which of the following depicts this condition?



Well-Designed Multiple Choice

- **Stem** (asks a question or poses a statement which requires completion)
- **Key** (the correct answer/s)
- **Distractor(s)** (incorrect option/s)

Eight Steps

- 1. Select an area of the test plan for the focus of the item**
- 2. Select a subcategory from the chosen area of the test plan**
- 3. Select an important concept within that subcategory**
- 4. Use the selected concept and write the stem**
- 5. Write a key to represent important information the entry-level nurse should know**
- 6. Identify common errors, misconceptions or irrelevant information**
- 7. Use the previous information and write the distractors**
- 8. Complete the item using the stem, key and distractors.**



1. Select an area of the test plan for the focus of the item.

***Safety and Infection Control**



2. Select a subcategory from the chosen area of the test plan.

***Standard Precautions/Transmission-Based Precautions/Surgical Asepsis**



3. Select an important concept within that subcategory.

***Evaluate infection control precautions implemented by staff members**



4. Use the selected concept and write the stem.

The nurse and nursing assistant are caring for a client with vancomycin-resistant enterococci (VRE). Which of the following activities by the nursing assistant would require **immediate** follow-up?



5. Write a key to represent important information the entry-level nurse should know

*Contact Isolation:

~ Assisting the client to ambulate in the hallway



6. Identify common errors, misconceptions or irrelevant information

- *Lack of understanding of isolation precautions
- *Uncertainty related to specific diagnosis

7. Use the previous information and write the distractors

* Leaving a blood pressure cuff in the client's room to be used by the client only

* Putting on a protective gown to assist the client to sit in a chair

* Taking the gloves off before leaving the client's room

8. Complete the item using the stem, key and distractors

The nurse and nursing assistant are caring for a client with vancomycin-resistant enterococci (VRE). Which of the following actions performed by the nursing assistant would require **immediate** follow-up from the nurse?

- a) Leaving a blood pressure cuff in the client's room to be used by that client only
- b) Putting on a protective gown to assist the client to sit in a chair
- c) Taking the gloves off before leaving the client's room
- d) Assisting the client to ambulate in the hallway(**key**)



What is Lippincott PassPoint?

PrepU Platform

Adaptive *Quizzing* Tool

- Very similar to how the NCLEX works
 - Adaptive to each quiz taken
- Alternative Style questions embedded throughout

Adaptive Quizzing

Advantages

- Formative assessments
 - Learner self-assessment
 - Educator self-assessment

Why?

- Simulate the NCLEX experience
- Build endurance
- Individualized
- Instant Remediation to EBP
- Integrate into Class
- Natural Consequence of Class Performance
- Prepares for Simulation and Clinical Environment
- Student Advising
- Unlearning

Clinically Oriented Remediation

- The level of content facilitates the transition from the classroom, to simulation, to the real world of nursing, because this content has been specifically designed for use in clinical practice.



Mastery Levels

- Require a Mastery Level of 5 for each week's quiz areas prior to each lecture
- **Encourage students to meet a Mastery Level of 8 prior to taking the NCLEX**



PassPoint Can Help Instructors To:

Determine the level of student knowledge acquisition in various times throughout their program.



Exam	Mastery Level	Total Number of Questions	Misconceptions	Compare Performance to class performance
1				
2				
3				
4				

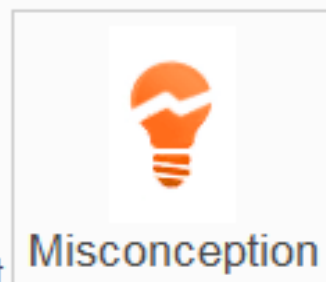
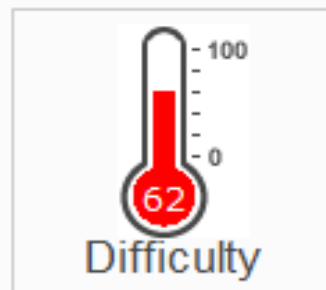
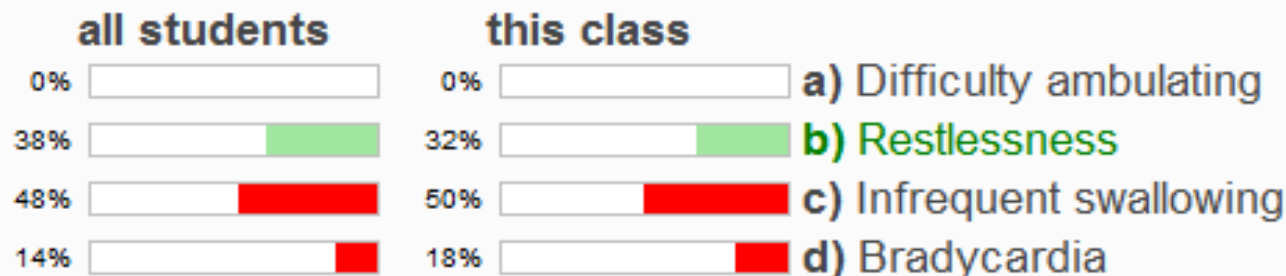
Question Example

Your patient is scheduled for a tonsillectomy in the morning. Following the surgery, what will you assess the patient for?

- a) Restlessness
- b) Bradycardia
- c) Infrequent swallowing
- d) Difficulty ambulating

Submit your answer

Your patient is scheduled for a tonsillectomy in the morning. Following the surgery, what will you assess the patient for?



Explanation: Hemorrhage is a potential complication of a tonsillectomy. Increased pulse, fever, and restlessness may indicate a postoperative hemorrhage. Difficulty ambulating and bradycardia are not something you would assess a posttonsillectomy patient for. Infrequent swallowing does not indicate hemorrhage, frequent swallowing does.

Reference:

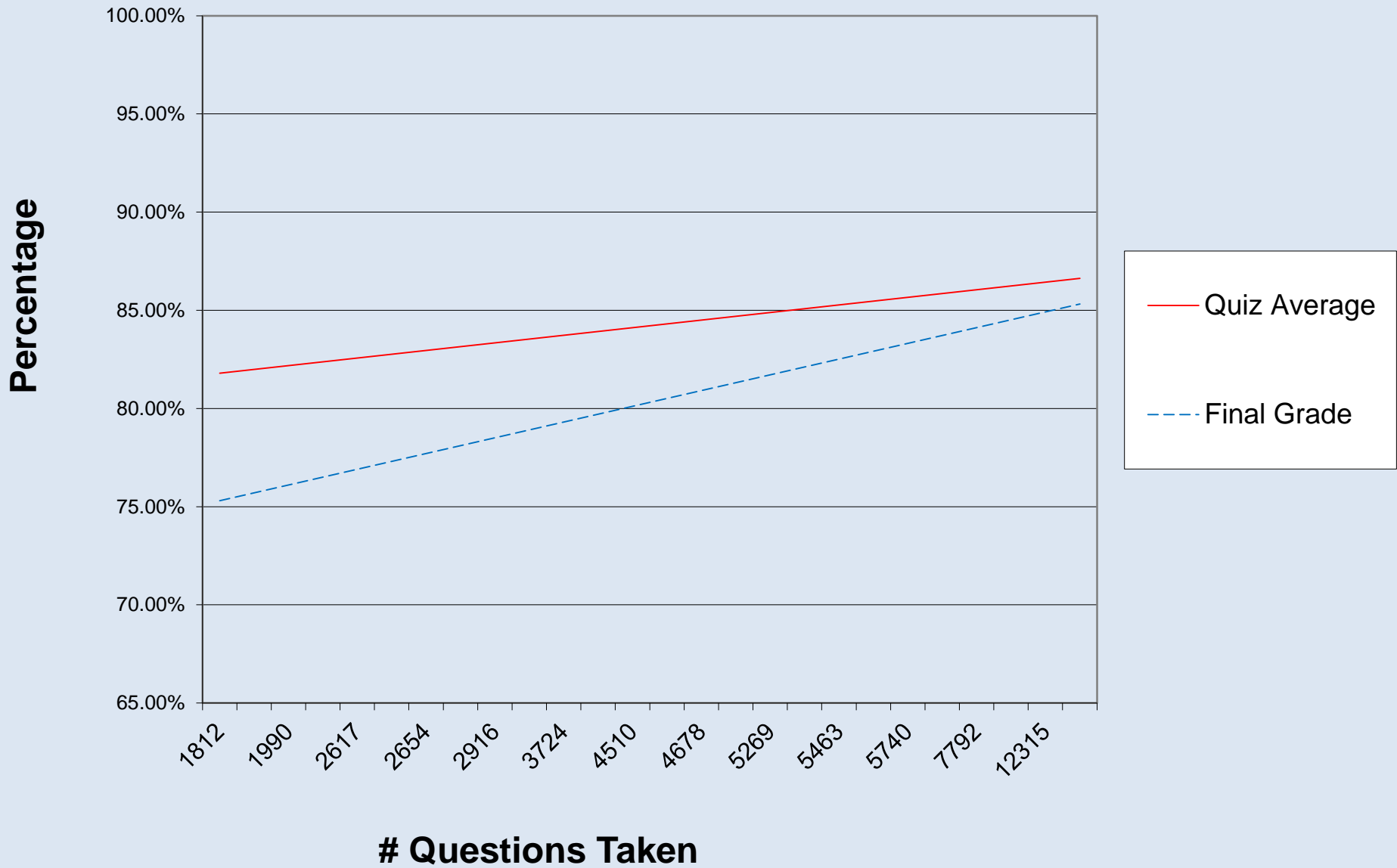
Smeltzer, S.C., and Bare, B. *Brunner & Suddarth's Textbook of Medical Surgical-Nursing*, 12th ed. Philadelphia: Lippincott Williams & Wilkins, 2009, p. 529.

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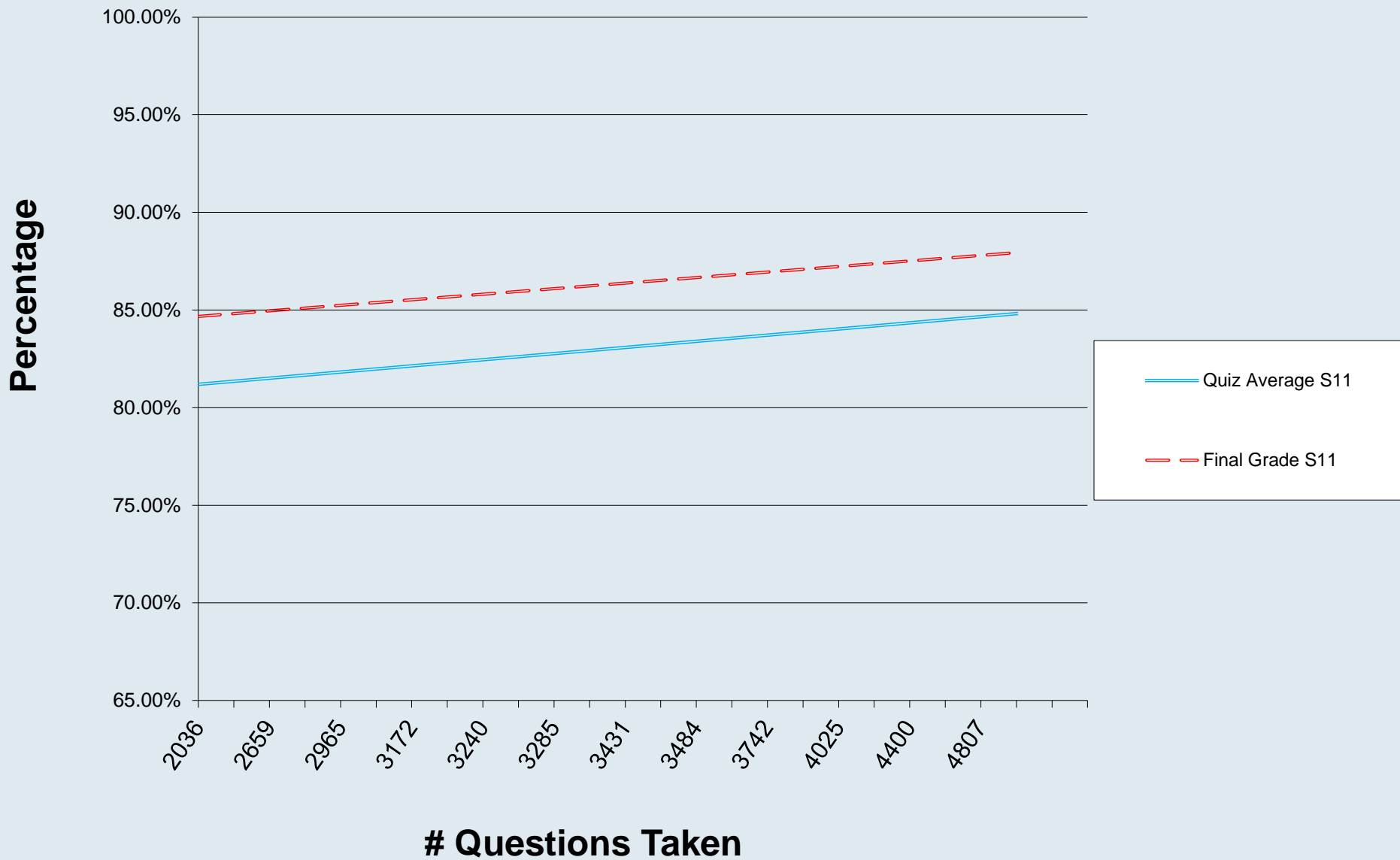
Bloom's Taxonomy: 3. Application



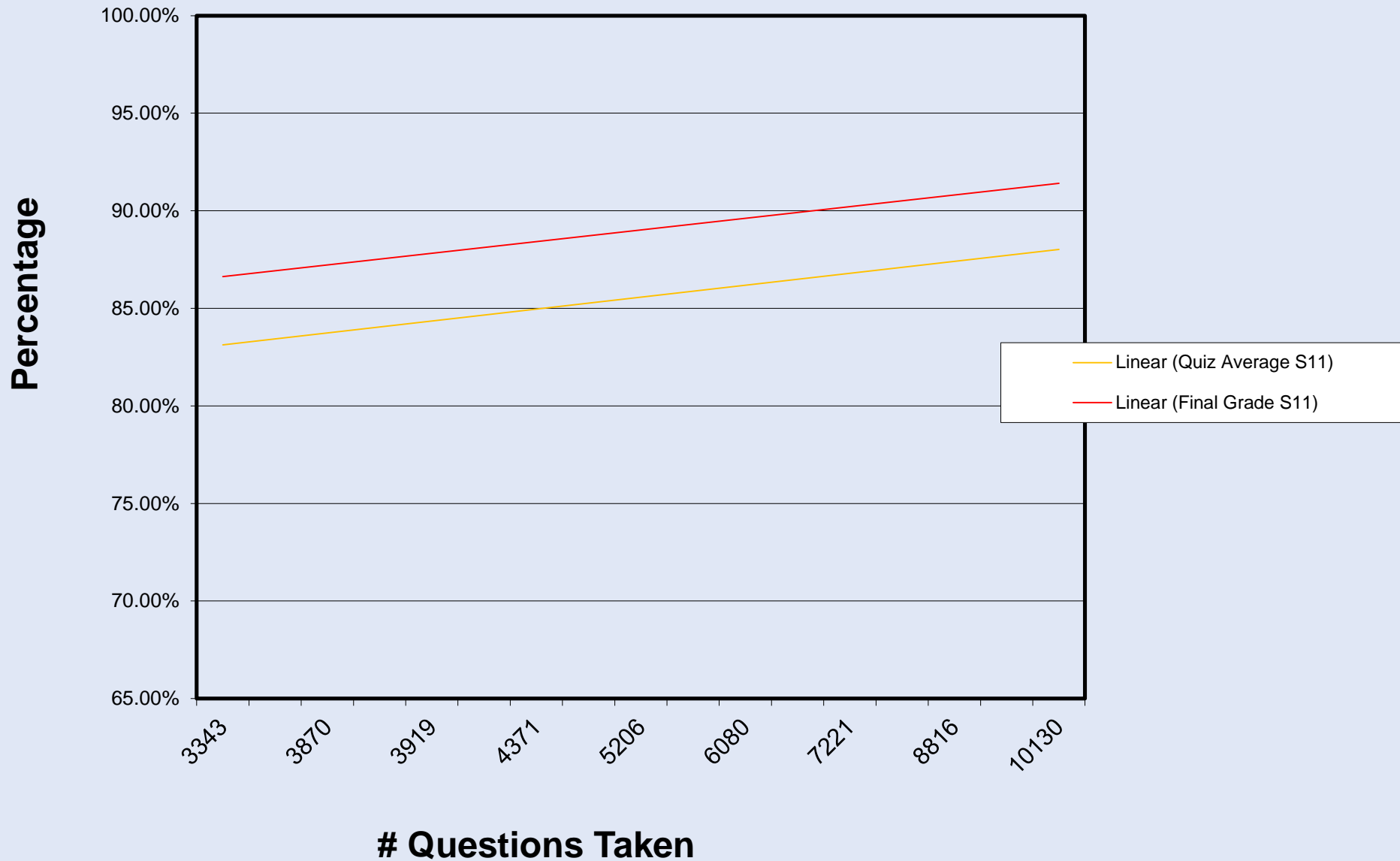
Adaptive Quizzing: Trend Lines F10



Adaptive Quizzing: Trend Lines S11



Adaptive Quizzing: Trend Lines F11



NCLEX Success Plan

Capstone Course Integration

Adaptive learning using **formative assessment** deployed across the curriculum enabling **retrieval practice** and **pinpoint remediation** is the best way for students to develop mastery of course content, achieve NCLEX success and prepare for clinical learning.

It's Not ALL About the Test

- Active Learning
 - Flip the Classroom
 - Run a Sim on an area needing unlearning
 - Priority Sims
 - Partner with Practicing HCPs (mimicry)
 - prepU >> vSim >> DocuCare >> Simulation >> vSim >> prepU

"Unlearning is like quicksand. The more you fight it, the worse it gets." - J a c k U l d r i c h





EDUCATION IS NOT
THE FILLING OF A PAIL,
BUT THE

Lighting of a Fire...

-W.B.YEATS

Questions

