

## National Council of State Boards of Nursing

## NCLEX® Using CAT - Video Transcript

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Compared to the dated pencil-and-paper tests we all experienced in the past, Computerized Adaptive Testing, or CAT, uses today's technology to tailor test questions to your ability level and achieve faster, more accurate, and fairer test results. At the forefront of using CAT technology for high-stakes examinations, NCSBN has been using CAT for NCLEX since 1994. Let's take a brief look at how NCLEX using CAT works.

The goal of CAT is to identify each candidate's competence by determining the difficulty level of questions a candidate can consistently answer correctly. We've invited these candidates to a fitness center because we think their workout can quickly help you understand the principles behind CAT. Let's say each free weight represents a question and we want to determine how heavy a weight you can lift; in other words, how difficult a question you can answer correctly. In this example, the trainer has established that this size weight represents the passing standard, and this correlates to the minimum competence needed to practice entry-level nursing.

The examination is designed to determine if you can consistently answer questions that are more difficult than the minimum competence standard, which in our example is this size weight. Lighter weights are easier to lift and represent questions that are less difficult than the passing standard. Heavier weights are more difficult to lift and represent questions that are more difficult than the passing standard. Each question, like each free weight, reveals more about the true competence level of the candidate.

With each answer, CAT's calculation of your entry-level competence becomes more precise. When you answer a question correctly, you've provided evidence that you could probably answer easier questions correctly. For that reason, the next question selected will be slightly more difficult. Increasingly more difficult questions will be asked until you incorrectly answer a question. At that point, the next question asked will be slightly less difficult. If that question is answered correctly, then a slightly more difficult question will be asked next, and so on, throughout the remainder of your NCLEX exam. Everyone will miss some questions because questions are programmed to be increasingly difficult until a question is answered incorrectly.

How computerized adapted testing works is illustrated by this map which represents a candidate's progress through the NCLEX. The NCLEX passing standard is illustrated by the blue line. Questions below the line are questions that are less difficult than the passing standard. Questions above the line are more difficult than the passing standard. The map represents both the difficulty of questions asked and the competence estimate of the

candidate's performance. In this example, the candidate successfully answers a series of increasingly difficult questions, then the candidate begins to answer some questions incorrectly. After answering the minimum number of questions required, the candidate reached a competence level that is significantly above the passing standard. When competency is determined, the examination is completed and the candidate passes. Conversely, when it is determined that the candidate is not competent, the examination ends and the candidate does not pass.

The number and difficulty of the questions will vary for each candidate; this is true for candidates above and below the passing standard. Some candidates will be asked fewer questions because a competent pass-or-fail determination was made quickly, for they consistently answered questions either significantly above or below the passing standard. Other candidates, however, who had competence levels near the passing standard, either a little above or below, will be asked more questions in order to determine their pass-or-fail results.

To ensure complete content coverage, all RN candidates will answer a minimum of 75 and a maximum of 265 test questions. PN candidates will answer a minimum of 85 and a maximum of 205 questions. Though most candidates finish in about 2 hours, you'll be given up to 6 hours to complete the RN exam, or 5 hours for the PN exam. This includes a tutorial and all break times.

A candidate will pass the NCLEX if he or she answers at least the minimum number of questions and achieves a competence level significantly above the passing standard, answers the maximum number of questions, and achieves a competence level above the passing standard even if not significantly above; or answers at least the minimum number of questions but runs out of time and has a competence level that has stayed above the passing standard consistently for all of the last 60 questions answered.

A candidate will not pass the NCLEX if he or she achieves a competence level significantly below the passing standard, answers the maximum number of questions and has a competence level below the passing standard, runs out of time and has a competence level that falls below the passing standard at any point during the last 60 questions answered, or answers fewer than the minimum number of questions during the time allowed.

Taking the NCLEX is the culmination of your studies, a thorough examination of your entry-level nursing knowledge, skills, and abilities. Passing the NCLEX demonstrates your competence and readiness to begin your career as a newly-licensed entry level nurse. Just like a well-designed fitness program can help prepare you for a healthy life, understanding how CAT works will better prepare you for the testing experience. At nclex.com you can review other materials to learn more about the exam. Good luck.