Next Generation NCLEX® News

The Next Generation NCLEX® News is a quarterly publication that provides the latest information about the research being done to assess upcoming changes to the NCLEX Examinations. In this issue, you will find information related to two of the final validation steps taken to engage key stakeholders and to ensure the seamless release of the Next Generation NCLEX (NGN).

Final Stages of Next Generation NCLEX Validation and Testing

As the release of the NGN examination in April 2023 quickly approaches, NCSBN is finalizing and validating the testing of all systems to ensure that the transition is seamless. To this end, two important projects were undertaken in 2022 to ensure a successful release. These were the first viewing of an exemplar maximum-length examination by nursing regulatory body (NRB) members and a beta test of the complete testing system with students. Both endeavors included representatives from across the U.S. and Canada.

Nursing Regulatory Body Review

The NRB review held May 9–27, 2022, supported the regulatory review of actual NCLEX examinations. Nursing regulators across the U.S. and Canada were invited to review a representative sample of examination items in the form of a maximum-length exam. There were 24 NRBs comprising 60 representatives who reviewed the NGN RN English, NGN RN French and NGN PN exams. The participants represented NRBs in all four U.S. regions and several Canadian provinces. In keeping with the established biannual NCLEX NRB review, representatives selected an exam associated with their NRB’s focus. In other words, NRBs that regulate RN and PN licensure had the opportunity to review both RN and PN NGN exams. NRBs that offer the NCLEX in French could review both RN English and RN French NGN exams.
Reviewers examined a set of 135 items that conformed to the approved 2023 NCLEX Test Plan design associated with the April 2023 launch of the NGN. Each exam included both traditional NCLEX items and the new NGN item types. There were various traditional items and clinical judgment trend, bow-tie and case study formats. Not only did the representatives provide feedback from a nursing regulatory perspective, but they also reviewed the items for overall functionality.

The nursing regulators’ comments were favorable and supportive of the NGN exam with the addition of clinical judgment and with the associated new item types. The comment themes were confined to general remarks regarding the new scoring model, item response directions and terminology clarifications. The NCSBN staff used this feedback to make item terminology clarifications. NGN resources, such as the library of NGN newsletters, addressed the remaining comments related to scoring and item directions.

**Student Beta Test**

The primary rationale for the student beta test was to validate the end-to-end functionality of the NGN examination process in a live environment. Prior to beta testing, substantial user acceptance testing (UAT) and end-to-end testing were completed to ensure all aspects of test delivery and scoring were functioning as expected and to requirement specifications. The beta test provided the opportunity to deliver the actual exam in the actual production delivery environment by having students take the exams in Pearson Professional Centers (PPCs). This was the final step in validating all aspects of the NGN from registration to exam scoring in the live environment rather than in UAT.

The beta test took place Sept. 6–30, 2022. Student participation was solicited through emails, word of mouth and international advertisements and during the September 2022 NCLEX Conference. All correspondence was provided in English and French. The target for the beta test was 100 PN and 100 RN participants. For the RN, participation was solicited from U.S. and Canadian students who speak English and French. For the PN, only U.S. student participants were solicited. The requirements for participation were that students must:

- Be enrolled in good standing in an approved RN or PN program
- Be in the final year of their RN or PN program
- Become eligible to take the NCLEX after March 31, 2023

The beta test provided the opportunity to deliver the actual exam in the actual production delivery environment by having students take the exams in Pearson Professional Centers (PPCs).
Student beta participants were not provided score reports because the primary focus of the study was to test the end-to-end functionality of the system in the live production environment.

The registration window was between Aug. 8 and 22, 2022. All registrants were provided a link to NGN resources to review all available NGN materials, such as the updated NGN exam tutorial and the set of NGN item types. Recruiting resulted in 2,412 requests to participate. From this initial pool of recuits, a subset of students was randomly selected to participate to meet the target sample size. The following numbers of exams were registered and completed during the beta test window.

- 112 PN exams from 11 U.S. states representing all four regions
- 105 RN U.S. exams from 42 U.S. states and the District of Columbia representing all four regions
- 18 RN Canadian English exams from Ontario, New Brunswick and Prince Edward Island
- Two RN Canadian French exams from New Brunswick

PN participants tested in 28 PPCs across the U.S. RN participants tested in 68 PPCs across the U.S. and Canada.

The key areas of evaluation for the beta test were as follows:

- Registration
- Test delivery
- Test design
- Item rendering
- Scoring
- Pass/fail decisions

Overall, the results indicated that all aspects of the NGN were working as expected and to the required specifications. No issues were reported with registration. Some participants needed to call and reschedule their appointments; rescheduling of participants worked correctly.

All aspects of test delivery functioned as expected. None of the participants noted any test delivery issues. In a few cases exams needed to be restarted, which happens occasionally during regular examinations. All restarts were reviewed and found to be normal network- or computer-related issues not associated with the NGN exam. All restarts were accomplished quickly and without issue. The most important issue related to restarts was to validate that no exam time was lost. In all cases, after the restart was initiated, the participants had the same amount of time left on the exam as they did when the exam needed to be restarted. Thus, participants continued to have the full five hours to complete their exams.

All items rendered correctly and functioned as expected. No participants noted any issues. An evaluation of the log files indicated that the items displayed quickly for the participants, the new item types displayed full functionality and correct scoring was implemented.
All exams followed the NGN test design and were scored appropriately. In addition, all decision rules were validated and implemented correctly. All exam results were validated by Pearson VUE’s validation scoring on an independent basis and rescored by NCSBN Measurement and Testing staff to ensure correctness. Both sets of rescores validated the initial exam scoring and item selection methodologies used during the live exam.

In addition to testing the key functionality of test delivery and scoring, the NCSBN team evaluated other aspects of the participants’ exams. Please note that these results are not generalizable since the key goal of beta testing was to ensure that the final system was running as expected and ready to go live for the public. In addition, the students were a self-selected group that submitted requests to participate and had not completed their educational requirements. Therefore, the following results are provided only for completeness.

Results between RN and PN were fairly similar. Participants took an average of about 118 items and finished in less than two hours. They spent about one minute per item. These values are very similar to the current NCLEX numbers and in line with the previous Special Research Section findings. There was higher precision around the current cut score observed in these results, which was in line with the statistical estimates made during the early simulation work that informed the test design.

Feedback from the students after the exam (N = 71) was positive. Only about 14% found the exam difficult or very difficult. Over half (58%) stated that they did not prepare for the exam in any way. Participants were provided with a free-text question to provide any thoughts, concerns or issues related to their experience and specifically the exam. Participants’ responses indicated a positive experience overall, specifically that the new clinical judgment scenarios and items were more realistic and like actual practice. One of the more frequent requests was that the participants would have liked to receive feedback on their performance, which was not provided because the basis for this beta test was to ensure the exam would be delivered and scored in the live environment.

Overall, the beta test was highly successful. Crucial requirements and functionality that had been previously validated during UAT were reviewed in the live delivery. All aspects of test design, delivery and scoring were validated and found to be functioning as expected. These results provide encouragement that the launch of NGN in April 2023 should be successful and that candidates should not have any issues or concerns.

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Summary

The NRB review and the student beta test were two of the final steps needed before going live with the NGN. The NRB review provided key stakeholders an opportunity to review an exemplar of the new test design incorporating new item types and clinical judgment items and evolving scenarios. Reviewers were able to interact with the items and ensure that the item types were easy to use and functioned as expected. The student beta test took the next step with the recruitment of current students to sit for an exam in the real environment. They not only interacted with the exam but also facilitated complete end-to-end testing of the test delivery process. Moreover, they provided live results to validate that scoring and selection were working as expected. Overall, both endeavors were successful and provided crucial review and testing needed to feel confident with the April 2023 release of the NGN.

Resources

For more information regarding the NGN project, please visit the NCSBN website and our Frequently Asked Questions, which address common questions from candidates and educators. The NGN Resources page includes past publications of the NGN News. NGN Talks & Videos houses short NGN videos on topics related to the NGN.