

Executive Summary: Misconduct Investigation

The December 2020 Assessment of Fundamental Knowledge™ (AFK™) had initially been scheduled for August 2020. Due to COVID-19 related lockdowns, the examination was digitized and offered in electronic format in December 2020 over two days.

During the fall of 2020, the NDEB® received email messages and phone calls indicating that:

- individuals were concerned that it was unfair the AFK™ and ACJ™ examinations were offered on two consecutive days as examinees from day 2 would be given the questions from day 1.
- event(s) were organized to discuss remembered questions on the evening of day 1.
- mock examinations offered at training courses were identical to NDEB® examinations.
- mock examinations offered at training courses used NDEB® copyrighted materials.

The NDEB® performed a statistical analysis of the results of the examinations offered on two consecutive days, the September 29 and 30 ACJ™ and December 16 and 17 AFK™. The analysis showed no statistical differences between the two days.

However, the detailed statistical analysis of the December 2020 AFK™ showed a considerable disparity between the pass rate of the December 2020 examination and pass rates of all previous AFK™ administrations. Despite no noticeable change in the pool of examinees, the examination pass rate had increased significantly. In depth analysis at the individual question level indicated that a significant number of questions performed differently than they did in previous administrations. These analyses led to the conclusion that a breach of examination content had occurred.

An examination that has been determined to contain a significant portion of exposed questions cannot be considered a valid and reliable assessment of knowledge; therefore, it was determined that results for the December 2020 AFK™ could not be released. Because the NDEB® was unable to separate individuals suspected of cheating from those that did not cheat, it was determined that all scores would be voided.

Consultation with external psychometric experts indicated that because the February 2021 AFK™ contained some questions that were part of the breach, the results of the February 2021 examination would have been similar to those of the December 2020 AFK™. Therefore, the February session was cancelled.

The decisions to cancel and void examinations were based on psychometric data and grounded in the responsibility to offer fair, valid, and reliable examinations.

Because of the question bank breach, psychometricians recommended a brand new examination be created. The August 2021 AFK™ was built with entirely new questions and followed the same blueprint as the December 2020 AFK™. Best practice for examination development was followed: the questions were selected according to the approved blueprint; they targeted the minimally competent dentist entering practice and the pass score was determined through standard setting.

The purpose of standard setting is to determine the minimum acceptable level of performance to pass an examination. During the standard setting of the August 2021 AFK™ every question was reviewed, and its difficulty was evaluated by a group of examiners. Organizations like the NDEB® periodically review the pass score because knowledge changes over time or when there is a change in the format of an examination.

Additional evidence confirming the decision to void the December 2020 AFK™ became available when the results of the August 2021 AFK™ were reviewed. The pass percentage of the December 2020 AFK™ was over 80%, representing a 40% increase over previous AFK™ administrations. The pass rate for the August 2021 AFK™ was 38%. The blueprint for the August 2021 AFK™ was identical to the December 2020 AFK™, the difficulty of the examination was the same, and the cohort of examinees was the same. The difference between the two examinations was that there were no repeated questions on the August 2021 AFK™.

Next Steps

- The NDEB® reviewed its intellectual property policies and has been working with legal counsel on strategies to deter cheating and copyright infringement.
- Efforts will be made to work collaboratively with examinees to deter cheating and sharing questions and content.
- The NDEB® has engaged a third-party to assist in identifying the use of NDEB copyrighted material on the web.