Assessment Development: An Introduction to NBCC & CCE Assessment Processes

KYLIE DOTSON-BLAKE
INTERIM PRESIDENT & CEO

CALLIE MARINO
INTERIM VICE PRESIDENT, CREDENTIALING AND QUALITY ASSURANCE

ISBAH ALI FARZAN
DIRECTOR, PSYCHOMETRICIAN

DAVID WHITTINGHILL
CONTENT DEVELOPMENT COORDINATOR
INTRODUCTION

The National Board for Certified Counselors maintains credentialing examinations for the profession of counseling that are utilized for state licensure and national certification. The infrastructure for developing, administering and maintaining these exams is extensive and engages stakeholders and professionals throughout the process. There are many levels of controls and oversight to ensure the integrity of the process.

While it is critical that NBCC maintains the privacy of proprietary information to ensure test security, our organization is striving to become more transparent about our test development process whenever possible to better inform stakeholders of the processes and intense data-driven work that goes into maintaining valid and reliable credentials.

This report shares information about the development process of the following two exams:

National Counselor Examination (NCE)
National Clinical Mental Health Counselor Examination (NCMHCE)
ASSESSMENT DEVELOPMENT COMPONENTS

03 PROFESSIONAL VOICE
Subject Matter Experts (SMEs)
Examination Committees
Technical Advisory Committee
Professional Community Nominees

06 CONTENT OUTLINE DEVELOPMENT
Job Analysis
Content Outline Development

07 ITEM AND FORM DEVELOPMENT
Item Writing
Form Development
Standard Setting

08 ITEM REVIEW AND REVISION
Item Review

09 ACCOUNTABILITY CONTROLS
Layered Professional Oversight
PROFESSIONAL VOICE

A fundamental requirement for a strong national model is the inclusion of the profession’s voice in the process of developing and maintaining the model. The assessments are central to the national model of certification and the profession has voice in the assessments at a number of different points, primarily by serving as Subject Matter Experts (SMEs) and by sharing their experiences through the job analysis survey responses.

Counseling professionals have voice in the assessment development process in the following ways:

- SMEs serve on the committee to create the Job Analysis
- Counselors complete the Job Analysis survey
- Exam Committee SMEs review the statistical outcomes from the job analysis and develop the content outline
- SMEs serve as item writers to create content for the assessments
- Psychometric Experts serve as leaders on the Technical Advisory Committee (TAC)
- SMEs engage in standard setting and form review

Though there are specific requirements for SMEs for eligibility on certain committees, all SMEs have the baseline requirements for eligibility:

- Education: Minimum of a Master’s Degree in their respective field. Individuals with a Doctoral Degree must make up the majority of committee membership.
- Experience: Minimum of five years of professional experience within the field. Experience must correlate with the exam of focus.
- Certification. Be in good standing with their respective credentials and licenses.
The Technical Advisory Committee (TAC) provides guidance on technical assessment matters pertaining to content outline and examination validity, reliability, accuracy, and fairness. Members of the TAC are highly regarded national experts who have been widely published in their fields. Areas of expertise include: assessment design; computer adaptive testing (CAT); assessment accommodations; uses of tests; mathematics, and disciplines specific to the array of professions served by the assessment programs.

The TAC is comprised of external professionals. The Assessment Department Director and the psychometrician(s) meet directly with the TAC. The TAC approves the form and the scholarly materials utilized for content development.

Engaging the Regulatory Community

AASCB NOMINEES

The state regulatory community holds powerful insights about the professional responsibilities and necessary competencies for practicing counselors. The involvement of professionals from the regulatory community in the development of the exams ensures that the protection of the public remains at the heart of all that we do as an organization. The regulatory community is recruited into the examination development process through AASCB. AASCB will consistently provide up to six nominations for exam committee membership, with membership seats for each examination selected from AASCB nominees. AASCB nominees must also meet eligibility requirements, ensuring that professionals selected for SME service have the necessary assessment expertise to contribute effectively to the work of the committee.
Exam development for standardized exams is a multifaceted process with extensive infrastructure requirements and engagement by a wide group of professionals. Most critically, exam development is an ongoing, cyclical process.

Exam development includes the following components:

- Job Analysis & Content Outline Development
- Item Writing
- Form Creation and Standard Setting
- Item Review and Revision

Throughout these steps, Subject Matter Experts provide critical voice and external, autonomous oversight. The development of the NCE and NCMHCE has always relied on the engagement of external SMEs and experts in statistical analyses and psychometric work. These professionals have been critically important to ensuring the strength and integrity of the assessment programs.

NBCC approached the development of the clinical certification exam with an intentional focus on drawing from the common core knowledge of professional counselors. In order to develop the exam, NBCC convened a committee of subject matter experts (SMEs) to explore exam format and develop items built on the core knowledge base of practicing counselors. This committee was led by psychometric experts with a deep knowledge of the counseling profession and the clinical practice of counselors. The dual expertise in psychometrics and counseling uniquely positioned the committee to frame an exam that reflected the central clinical requirements of counselors through real world simulated cases.

The exam was developed with a clear intention to focus on the clinical application of core counseling knowledge. This team of SMEs developed a content outline for the assessment reflective of core counseling clinical areas of practice. The format of the assessment was presented as counseling case simulations comprising real-life clinical narratives followed by questions measuring the skills of the examinees to gather information and formulate clinical decisions. This case simulation format has served the needs of the profession well for many years and contemporary technology, and deeper psychometric analysis now offers innovative opportunities to continue to strengthen the alignment of the assessment with the clinical practice of counselors.
JOB ANALYSIS & CONTENT OUTLINE DEVELOPMENT

The most recent job analysis was finalized in the Summer of 2019 and a new content outline has been released. The job analysis process begins with survey development. In 2016-2017, two committees of Subject Matter Experts worked together to develop the job analysis survey. These committee members participated in the identification of professional components and job-related tasks. The committee also worked to draft items, review the survey format and provide overall feedback and direction to the psychometrician and staff working on the job analysis. The survey was distributed to more than 100,000 physical addresses and more than 130,000 email addresses.

The primary goal of the job analysis survey was to identify the work tasks most prevalent within the counseling profession. After completion of the statistical analysis of survey results, the Psychometrician and staff reviewed the data with the Exam Committee and the SMEs engaged in an intense period of developing the content outline. Following the development of the comprehensive content outline, the SMEs reviewed and recategorized each item in the item bank to align with the new content outline.

JOB ANALYSIS: HISTORICAL INFORMATION

Prior to the completion of the 2019 job analysis and content outline, the previous job analysis and content outline for the NCE was completed in 2010. The 2010 NCE job analysis was conducted with the engagement of an experienced committee of Subject Matter Experts and staff, who were also responsible for the development of the content outline. All subsequent NCE examination forms were developed by Exam Committees utilizing the content outline from the 2010 published job analysis. The NCMMHCE forms have all been developed from the content outline approved by the Exam Committee based upon expert knowledge held by the SMEs in 2008.
Historically and for the current exam items in use, items are developed by SMEs and stored on secure servers and in secure item bank databases. Through extensive engagement by Exam Committee SMEs, item writers and the Content Development Coordinator, items are constructed and research citations are provided for each item. Items are developed and reviewed by the SMEs, and consensus must be reached by the full committee before an item is approved for use as a field item. Items are field-tested and reviewed again by the Psychometrician and Exam Committee prior to being released as an approved item for inclusion in the assessment. The process ensures that each item is reviewed by a number of professionals in a controlled, secure environment before being approved for utilization. Each form of the NCE and NCMHCE includes an established number of items being field-tested.

Test forms are assembled by the Psychometrician and reviewed and approved by the Exam Committee prior to being inserted into a testing cycle. Once 300 examinees or more have tested on a form, standard setting is conducted by the Psychometrician and Committee and then the form is finalized released for full use.
Current assessment development best practices indicate that assessments should be evaluated annually by SMEs across multiple dimensions, including: item difficulty, item discrimination, distractor effectiveness, candidate volume, score distribution, reliability, average score, standard deviation, standard error of measure and percentage of candidates passing. Previously NBCC Psychometricians and SMEs evaluated assessments, but did not utilize item discrimination in the evaluation. Starting with the 2019-2020 examination cycle, the lead Psychometrician will evaluate assessments by reviewing items for all components, including item discrimination, deepening the review of item level data. Items that are determined statistically to less effectively discriminate will be reviewed further by the Content Development Coordinator, who will make a determination to either revise or retire the item. By engaging in an ongoing, multifaceted review of items, the assessment team will be able to ensure that the assessments continue to remain aligned with the needs of the profession and current best practices in assessment.
ASSESSMENT PROGRAM ACCOUNTABILITY CONTROLS

<table>
<thead>
<tr>
<th>ASSESSMENT DEVELOPMENT COMPONENT</th>
<th>ESTABLISHED CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JOB ANALYSIS SURVEY CREATION</strong></td>
<td>JOB ANALYSIS COMMITTEE OF SUBJECT MATTER EXPERTS</td>
</tr>
<tr>
<td>Involves survey creation, mailing &amp; distribution of surveys via email.</td>
<td></td>
</tr>
<tr>
<td><strong>JOB ANALYSIS STATISTICAL ANALYSIS</strong></td>
<td>PSYCHOMETRICIAN</td>
</tr>
<tr>
<td>Involves statistical analysis, report creation &amp; presentation of report to Exam Committee</td>
<td></td>
</tr>
<tr>
<td><strong>CONTENT OUTLINE DEVELOPMENT</strong></td>
<td>PSYCHOMETRICIAN &amp; EXAM COMMITTEE SUBJECT MATTER EXPERTS</td>
</tr>
<tr>
<td>Involves review of the job analysis report and identification of key tasks</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM WRITING &amp; FORM CREATION</strong></td>
<td>CONTENT DEVELOPMENT COORDINATOR &amp; EXAM COMMITTEE SMES, ASSESSMENT STAFF</td>
</tr>
<tr>
<td>Involves developing items based on the content outline and compiling form.</td>
<td></td>
</tr>
<tr>
<td><strong>STANDARD SETTING</strong></td>
<td>PSYCHOMETRICIAN &amp; EXAM COMMITTEE SUBJECT MATTER EXPERTS</td>
</tr>
<tr>
<td>After the new form has been utilized by at least 300 candidates, the standard setting process is completed.</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM REVIEW AND REVISION</strong></td>
<td>CONTENT DEVELOPMENT COORDINATOR &amp; EXAM COMMITTEE SMES, ASSESSMENT STAFF</td>
</tr>
<tr>
<td>Items are monitored after exam cycles and items that don’t meet necessary standards are flagged to be revised or retired. An established number of items are field tested during each examination cycle to ensure that there is a robust pool of approved items.</td>
<td></td>
</tr>
</tbody>
</table>