Dive Deeper into Assessment Development

Top 11 Tips to Remember When Creating Test Plans and Blueprints
by Sue Steinkamp, Vice President of Assessment Development and Psychometrics, Scantron Corporation

A solid test plan and detailed blueprint are the foundation that can lead to a quality assessment. Review the ten tips below to help you with the test plan and blueprint creation process.

A **test plan** outlines the overall content domain that needs to be tested, as well as the types of assessments that are needed to fully and accurately cover that domain.

A **blueprint** contains the specifics for each individual test; it includes information such as high level content sections, subsections, percentage of items included in each section, item types, scoring methodologies, and approved reference materials.

A strong assessment development process should include the tips in this article so you can be successful during test planning and blueprint creation. As you begin this process, it’s important to identify the human resources your organization has and evaluate their level of expertise to determine whether or not training, additional support, or both will be needed.

### 4 Test Plan Tips

1. **Create a solid test plan.**

   Clearly identify the types of individuals to be assessed along with the goals for each type of assessment. Determine the references, training documents, etc. that will be used to create your test. These references and training materials are what test takers will be assessed on and they need to be clearly noted.

2. **Establish the rules of the test administration.**

   How much time will be allowed for individuals to complete the test? When will the test be administered? Will the test be administered using paper/pencil forms, online, or both?

3. **Determine the assessment types.**

   Identify the types of assessments needed to fully support the goals of your organization. These may include:
   - Survey assessments
   - Observational assessments
   - Traditional (written) assessments
   - Practical assessments
4. Determine the item types.

Identify the item types (single-response multiple-choice, multiple-response multiple-choice, short response, extended response, etc.) that will be included on the test.

7 Blueprint Tips

1. Identify the content areas to be assessed.

Include both major domains to be covered as well as sub-domains that are necessary to evaluate the knowledge, skills, and abilities for the job in question.

2. Clarify the part of the domain/sub-domain to be assessed.

Identify the specific part of the content domain you plan to assess with each item.

3. Assign the cognitive complexity.

Indicate the cognitive complexity level for each domain and sub-domain included on the blueprint.

4. Assign the number of items per domain/sub-domain.

Determine how many items will assess each content domain/sub-domain. Remember, you need to consider the total number of items on your test. Also, consider the weighting or importance of certain content domains over others.

5. Assign item types.

Indicate the item types that will be used to assess each domain/sub-domain. If two or more item types will be used to assess a domain/sub-domain, be sure to indicate this on the blueprint.

6. Review the blueprint against the test plan.

Compare the blueprint, total items, domains/sub-domains to be included, etc. to the test plan in order to make sure that it is aligned.

7. Maintain the blueprint.

After administration and prior to the next test administration window, review the blueprint against job requirements or training programs to make sure no revisions need to be made to the blueprint.

At the completion of these steps, you should be ready to begin creating or selecting content. Prior to doing so, you might consider creating or selecting model items. These items will dictate the style and format you want all items to follow. Doing so will help maintain a consistent look and feel across the test(s). These models can also act as a guide for assessing the content domains indicated on the blueprint.
Sample Blueprint
The following illustrates a sample blueprint. The callouts on the blueprint correspond to the tips discussed above (not all tips are illustrated):

<table>
<thead>
<tr>
<th>Certified Nursing Assistant</th>
<th>No. of Items</th>
<th>% of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Physical Care Skills</td>
<td>46</td>
<td>61%</td>
</tr>
<tr>
<td>I.A Activities of Daily Living</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td>I.B Basic Nursing Skills</td>
<td>29</td>
<td>39%</td>
</tr>
<tr>
<td>I.C Restorative Skills</td>
<td>6</td>
<td>8%</td>
</tr>
<tr>
<td>II. Psychosocial Care Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.A Emotional and Mental Health Needs</td>
<td>8</td>
<td>11%</td>
</tr>
<tr>
<td>II.B Spiritual and Cultural Needs</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>III. Role of the Nurse Aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.A Communication</td>
<td>6</td>
<td>8%</td>
</tr>
<tr>
<td>III.B Client Rights</td>
<td>5</td>
<td>7%</td>
</tr>
<tr>
<td>III.C Legal and Ethical Behavior</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>III.D Member of Health Care Team</td>
<td>6</td>
<td>8%</td>
</tr>
</tbody>
</table>

Scantron has an extensive track record of providing assessment services to help thousands of customers succeed in their assessment programs. We’ve helped organizations with workshops and consulting on a variety of testing topics and assessment development processes. We’ve validated external assessment efforts and demonstrated positive business impact for various types of clients and their assessment programs.

One critical challenge is to develop an assessment plan that fulfills all of the needs of various stakeholders (e.g., public, test takers, management, and executive team). This might involve developing a traditional written assessment to be used as a pre-employment exam. It might also include a validated observational assessment to confirm compliance with organizational and industry safety protocols. Scantron can develop these deliverables using the same proven assessment development process we follow to create our own item banks and assessments—or you can choose to incorporate existing Scantron materials into your own plan. If you want to play a more active role in assessment creation, Scantron can assist with a variety of professional development activities that will instruct existing organizational resources in how to create valid test blueprints and develop quality assessment items.
Another key element is providing support to build organizational expertise. Scantron can develop your assessment elements—and we can provide consulting and workshops on a variety of topics, including:

- Job Analysis
- Blueprint development
- Item development plan
- Item writing and review
- Bias and sensitivity review
- Test form creation and delivery
- Statistical analysis and interpretation of results
- Custom assessment projects

Whatever the assessment assistance you need, Scantron has the products, tools, and expertise to help you ensure that you have the right program for your organization. Our comprehensive suite of assessment services helps you make the most out of your assessment development process. Whether you want to do it yourself with in-house experts and just need a little support or whether you want a partner to guide you through the overall process, Scantron can meet you where you are and help get you to where you want to be.

Contact Us:
1.800.722.6876
www.scantron.com
Scantron Corporation. 1313 Lone Oak Road, Eagan, MN 55121