Creating Effective Interview Questions (Tier 2: Intermediate)

Purpose:

Create competency-based interview process for an Epidemiologist II (Intermediate Tier) position in your epidemiology department utilizing the Applied Epidemiology Competencies (AECs).

How Do I Create a Competency-based Interview Process?

A competency-based interview process uses clear selection criteria, effective interview questions, and structured interviews to evaluate an individual's knowledge, skills, and values beyond what qualifications and work experience are listed on paper. You should use a competency-based job description as a starting point for the creation of questions that assess the candidate's competencies in the essential and non-essential functions of the job they are interviewing for, whenever possible. It is important to design the interview process to attract varied candidates and consistently and fairly assess these individuals.

Review the following steps to create a competency-based interview process using the AECs for an epidemiologist position in your department.

Step 1:

Develop clear selection criteria

Develop clear selection criteria based on the competencies and skills outlined in the job description. Evaluate which competencies are essential and which are nice to have. Interviewers should understand that certain candidates may not demonstrate all of the job's essential skills but if they are willing to learn and the organization can commit to providing training and support, they may still be a good candidate.

Remember: the AECs can be used to describe essential job functions and competencies expected based on the role and the level of skill needed ranging from entry-level epidemiologists to senior-level positions.

Step 2:

Create effective, competency-based interview questions

After defining the selection criteria, create effective, competency-based interview questions that allow interviewees to assess the candidate's strengths and weaknesses in the key skills needed for the position. These questions should be aligned with what success looks like for the role and what you expect the answers to demonstrate.

Interview questions should focus on direct experience with the competencies and capability to apply knowledge, experience, and flexibility. Ensure questions do not always focus on a time when something did not go well to balance positive- and negative-geared questions.

Consider utilizing case-based interviews or skills assessments as appropriate for the position to evaluate a candidate's problem-solving performance consistently and objectively. Using skills assessments allows applicants to apply what they know and demonstrate their expertise, which can reduce bias for those who may not have had internships or jobs that were directly relevant to speak about. This provides an opportunity for interviewees to share not just what they have done but also what they are capable of doing.

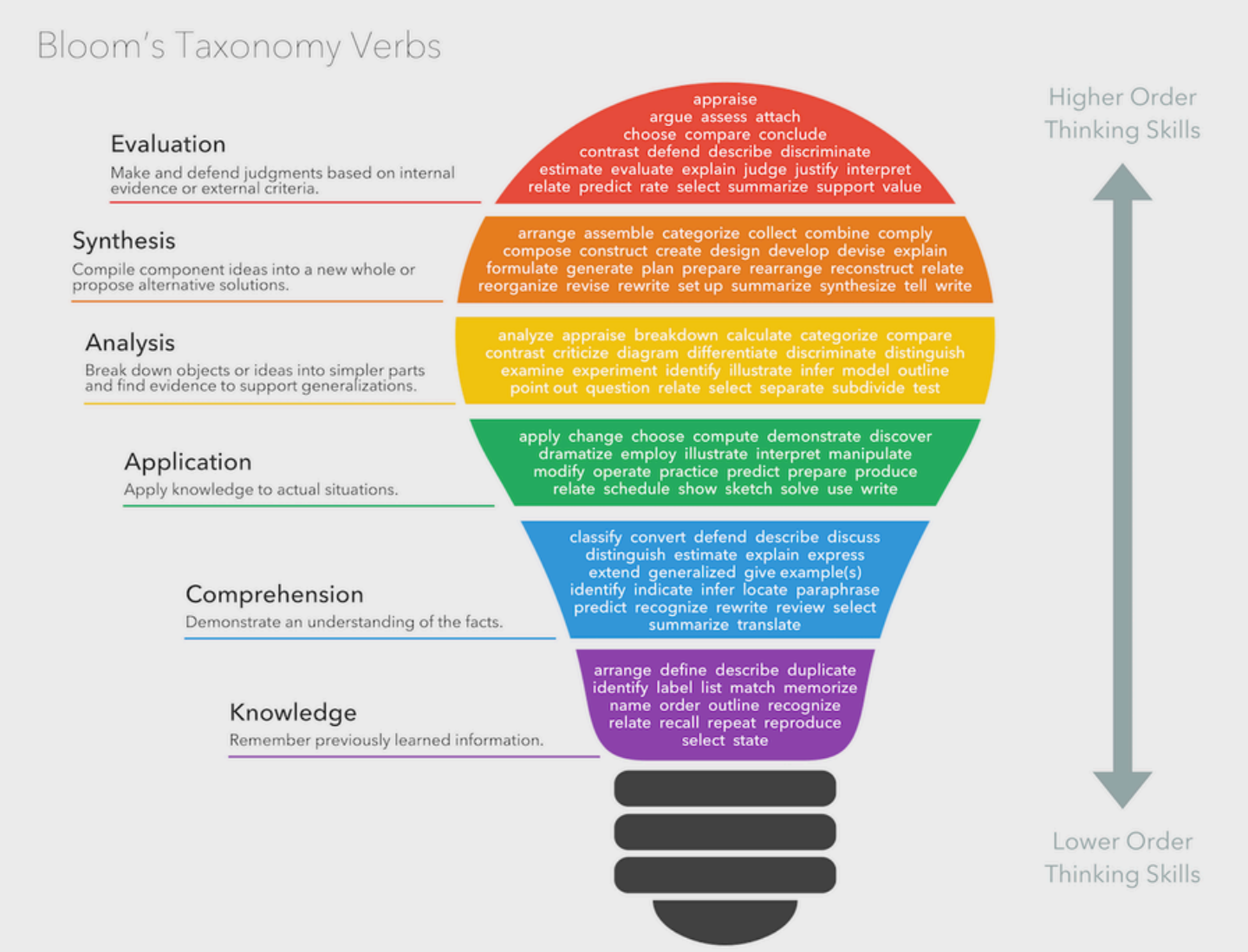
Using the AEC's Skill Progression by Tier:

Individuals creating job descriptions and competency-based interview questions can utilize the AECs to select measurable skills that increase in complexity and specificity as the individual progresses through the tiers.

Bloom's Taxonomy was used to describe the progression of skills from knowledge to application, and finally to evaluation. For example, the verb for AECs subcompetency 1.4.1. progresses from identifies, to explains, to assesses, and finally advocates for.

Competency 1.4. Conducts surveillance activities (e.g., reviews surveillance data needs, assesses existing surveillance data and systems, collects, analyzes, evaluates, and communicates surveillance data)			
Tier 1: Foundational Subcompetencies	**Tier 2: Intermediate Subcompetencies**	**Tier 3: Practiced Subcompetencies**	**Tier 4: Advanced Subcompetencies**
T1: 1.4.1. Identifies surveillance data needs for factors affecting the health of a community	**T2: 1.4.1.** Explains surveillance data needs (e.g., case definitions, data sources, quality, limitations, data collection elements, data transfer, data collection timeliness, frequency of reporting, uses of data, functional requirements of information systems to support)	**T3: 1.4.1.** Assesses surveillance data needs (e.g., data quality, availability, relevance, suitability, simplicity, sensitivity, predictability, timeliness, representativeness, flexibility)	**T4: 1.4.1.** Advocates for surveillance data strategies (e.g., case definitions, data sources, quality, limitations, data collection elements, data transfer, data collection timeliness, frequency of reporting, uses of data, functional requirements of information systems to support)

Interviewers should familiarize themselves with the action verbs and progression of the order of thinking skills associated with Bloom's taxonomy to better understand and evaluate the interviewee's responses describing their experience and capabilities.



Using the STAR Technique to Create Competency-based Interview Questions:

A common technique to create and answer competency-based interview questions is referred to as "STAR". The STAR technique can be used to incorporate Bloom's taxonomy in asking interview questions as well as listening for appropriate action verbs in a candidate's response.

The STAR method can be applied in the context of asking a potential candidate about their involvement in an epidemiologic study:

Situation- this part asks for the context of a situation or challenge.

- Consider asking: "Tell me about a time when you were involved in an epidemiologic study."
- You may expect to hear briefly about what the study was and why it was being performed here.

Task- this part addresses what the candidate's responsibility or role was in the situation.

- Consider asking: "What was your role in the epidemiologic study?"
- You should expect to hear briefly about their role, whether it was assigned to them or if they selected it, and why they had those responsibilities.

Action- this part details what actions the individual took during the situation, what they did to achieve success, and contains a lot of information about the applicant's level of competency.

- Consider asking: "What tasks did you perform and what skills did you use during this epidemiologic study?"
- You may hear about study design, data collection, data cleaning/analysis, data interpretation, data presentation, and development of a public health action depending on the experience and skills of the candidate.
- This part of the candidate's answer should help you assess whether they have the correct level of competency based on Bloom's taxonomy and the AECs to successfully perform the role.
    - For an Intermediate Epidemiologist, you may listen for verbs such as conduct, define, communicate, collaborate, and apply.

Result- this part describes what results were the outcome of the action performed by the candidate.

- Consider asking: "What was the major outcome or achievement of the epidemiologic study?"
- You should expect to hear about the interventions that resulted from the study, what the candidate learned, and what they gained from the experience.

Step 3:

Conduct structured interviews

Conduct structured interviews that ask questions to all candidates in the same order to provide them all with the same opportunity to describe their skills and experience. Allow for additional time for candidates to discuss unique expertise or items from their resume/CV.

Where possible, have multiple individuals interview the candidate either individually or as a panel to evaluate the interviewee from different perspectives. Be mindful about the time of scheduled interviews and number of interviews that will be conducted with each candidate. Often interviewees will need to take time off at their current job to interview for new positions and scheduling multiple interviews on multiple days can be difficult and further inequities. Inform interviewers about the expected scoring system and how to efficiently listen to and evaluate responses to ensure consistent and fair grading of candidates. Instruct them to take notes during the interview on what was said to avoid recall bias and to be objective on any physical observations of interviewees (e.g., "they did not make much eye contact" as opposed to the interpretation of "they were nervous and uncomfortable"). Consider training interviewers about unconscious bias and ways to combat it before they conduct their interviews. Individuals often prefer candidates who look like, think like, and talk like them and tend to assess them as having better likeability or organization cultural "fit". Educate interviewers about the importance of considering soft skills and likeability but as only a part of the candidate's overall skills and capabilities.

Consult with your Human Resources group to ensure compliance with organizational requirements and any standardized processes for interviews and documentation.

Example Interview Questions for an Epidemiologist II (Intermediate Tier):

1. What interests you about this Epidemiologist II position and how does it fit into your long-term career goals?

2. Summarize your expertise and experience that has prepared you for this position.

- **Optional follow-up questions/prompts:**
  - Describe an epidemiologic investigation that you are particularly proud of participating in.
  - What experience do you have managing financial resources for epidemiology projects or programs (e.g., grant funded projects, vendor contracts, consultants, etc.).
  - How have you defined public health actions and interventions while applying health equity principles?
  - What experience do you have collaborating with other public health professionals and partners?

3. Please describe your experience using surveillance systems to monitor trends, interpreting surveillance data, and any involvement you have had in evaluating a surveillance system.

- **Optional follow-up questions/prompts:**
  - What surveillance systems (or types of systems) have you used previously? (For example: notifiable diseases, syndromic/ESSENCE, behavioral/BRFSS, electronic lab reporting, mortality records).
  - What experience have you had working with informaticians to design or optimize surveillance databases or tools?

4. Tell me about your familiarity with qualitative and quantitative data management and analysis tools, such as SAS, Stata, SPSS, R, Epi Info, etc. Which software program(s) do you use? Please share an example of an analysis you have done.

- **Optional follow-up questions:**
  - What responsibility have you had for data management and cleaning?
  - What is the largest data set you have worked with?
  - What has been your experience with primary data collection and analysis of that data?
  - What is your comfort level with analyzing both qualitative and quantitative data?

5. Imagine the following scenario: You've finished an analysis of local infant mortality data. The trend in infant mortality among infants born to Hispanic moms is getting worse—that is, infant mortality is visually increasing. However, when you test the trend for statistical significance, it is not statistically significant. How would you interpret these findings and what would you recommend as next steps?

- **Optional follow-up questions:**
  - How can you use your knowledge of biases, and systemic and structural factors that affect health equity to frame your findings?
  - How would you tailor your communication of these findings to the impacted community to ensure the information is appropriate for the audience, content, and method of dissemination?

6. Please share an experience where you've taken part in an epidemiologic study. This could be an assessment of a community health issue, an outbreak investigation, or another epidemiologic study. What was your role in the epidemiologic study and what did you work on?

- **Optional follow-up questions:**
  - How were you involved in identifying and prioritizing appropriate public health actions based on the findings?
  - How did you summarize the findings? (A presentation, report, or another format?)

7. Imagine you are the team lead on an outbreak investigation in which the number of cases is quickly growing. You've been asked to summarize the investigation findings into talking points for a media briefing your Communications office is giving tomorrow, but your team is struggling to complete all the new case interviews and enter the data. You haven't been able to review the latest report from the Public Health Lab that contains results on the newest case-patient specimens, and the Microbiology lead just left a message saying there was a problem with the samples that the Environmental Health inspectors collected. Lastly, you also need to finish writing your assigned section of the CDC ELC grant before the fast-approaching deadline.

- **Questions for this scenario:**
  - How would you prioritize these multiple, urgent needs?
  - What approach would you take to engage your team members as you continue this investigation?
  - How would you communicate with the Microbiology lead and the Environmental Health inspectors about the problem with the environmental samples?

8. Is there any additional information relating to your resume/CV or past experience that you would like to share with me? If yes, please share it.

9. What questions do you have for me?

References:

- Carnahan, B. 6 Best Practices for Creating an Inclusive and Equitable Interview Process. (May 25 2023). Harvard Business School. Available at: https://www.hbs.edu/recruiting/insights-and-advice/blog/post/6-best-practices-to-creating-inclusive-and-equitable-interview-processes.
- Indeed Editorial Team. 13 Competency-based Interview Questions and How to Prepare for the Interview. (July 21 2023). Indeed. Available at: https://www.indeed.com/career-advice/interviewing/competency-based-interview.
- Birt, J. How to Use the STAR Interview Response Technique. (November 30 2023). Indeed. Available at: https://www.indeed.com/career-advice/interviewing/how-to-use-the-star-interview-response-technique.
- Mind Tools Content Team. How to Run Competency Based Interviews: Measuring Skills for Specific Roles. (n.d.). Mind Tools. Available at: https://www.mindtools.com/ao3gjnv/how-to-run-competency-based-interviews.
- Grantham, N. Bloom's Taxonomy Verbs. (September 13 2023). Fractus Learning. Available at: https://www.fractuslearning.com/blooms-taxonomy-verbs-free-chart/.

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