Engagement Observation Protocol Instructions


This detailed, activity-driven protocol records the affective, behavioral, and cognitive engagement of predetermined focal participants. It can be used with learners of any age.

**Before you observe:**

- **Review all instructions and the protocol itself.** It is a good idea to complete one or two practice protocols, if possible, to familiarize yourself with the process and develop your own note-taking strategy (e.g. what abbreviations you want to use).

- It is a good idea to have multiple observers, if possible. If you have multiple observers, **establish inter-rater reliability** by completing practice observations on the same focal participant, then comparing your notes and coding and discussing your observations.

- **Decide how you will determine observation periods.** During a single session, you should switch to observe multiple focal participants. For this protocol, you can switch at new sequential segments (change in activity, e.g. moving from a facilitator lecture/introduction to a hands-on activity) or predetermined time periods. Use this guide to determine time periods:

<table>
<thead>
<tr>
<th>Length of session</th>
<th>Divide into…</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 60 minutes</td>
<td>Equal segments of 3</td>
<td>45 min: 15 min/observation 20 min: 6 min/observation</td>
</tr>
<tr>
<td>60-119 minutes</td>
<td>10 minute segments</td>
<td>60 min: 6 segments 90 min: 9 segments</td>
</tr>
<tr>
<td>120 minutes or more</td>
<td>20 minute segments</td>
<td>120 min: 6 segments 180 min: 9 segments</td>
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- **Gather your materials.** Make sure you have a non-smudging pen, and enough copies of the protocol for the number of participants you will be observing, as determined in the prior step (if you plan to fill it out in real-time) or note paper (if you will be taking field notes and transferring them to the protocol). A clipboard, watch, and paper or binder clips to keep copies together are also useful tools.

**Completing the observations:**

- **Identify your focal participants.** You can do this prior to the observation period if you have a list, or at the beginning of an activity (typically there is a “circle up” time around a teacher or facilitator when you can count off participants). Using the determination above, decide how many focal participants you will observe (if you...
are switching based on sequential segment, choose a high number). Using a random number generator, count off the participants starting from the facilitator or educator, skipping over participants that have already been assigned (so that you don’t observe them twice). On a piece of scratch paper, note the participants in the order that you will be observing.

- **Tip:** www.random.org or the RNG app on iOS are good random number generators.
- **Tip:** Your codes for participants should be anonymous. Use something that you will remember, but will not be identifiable. For example, “GWPG” is acceptable; “girl with pink sunglasses” is not.
- **Tip:** Here is an example of assigning focal participants:

  A group of 15 students exists the school bus and line up behind their teacher. You plan to observe 6 students in 10-minute segments. Using the RNG app on your phone, you generate the following random numbers: 7, 2, 9, 1, 15, 2. Starting from the teacher at the head of the line, you count to the 7th student in line. That is your first focal participant; you assign them a code. Then you count 2 students behind the first focal participant and that is your second focal participant; you assign them a code. Continue counting until all numbers have been assigned.

- **Introduce yourself.** Whenever possible, introduce yourself to the group and tell them what you are doing. If learners are of an appropriate age, you can offer to let them see your notes. Here is a sample script you can customize for your observations:

  Hi! My name is _____ and I am from _______. Thanks for letting me join your group today. I am going to be taking some notes on the activities you’re doing, which we hope will help make the activity even better in the future. If you are interested in knowing more, or seeing what I am writing down, come talk to me anytime. Otherwise, I will stay out of your way. I look forward to a fun activity today!

- **Begin your observations.** Take detailed notes focusing on the actions of your focal participant, supplementing with contextual information as necessary. Get as close to your focal participant as you can without being disruptive. Frequent time stamps are extremely useful! You have the option of filling out the notes on the protocol summary sheets directly, or taking field notes and transferring them later. If you anticipate wanting to record lots of detail and quotes, take field notes and transfer them later.

  - **Tip:** you may emphasize different things during your observation. For example, you may be looking for participants to use a specific science tool, or you may be very interested in the questions they ask their peers. This is determined by your evaluation questions.
  - **Tip:** See the sample field note and sample completed protocol available on activationlab.org/toolkit for examples of detailed field notes.

- **Switch focal participants until you have reached your target number of observations.** Using the focal participant count and codes you identified earlier,
continue to make observations. Resist the urge to switch participants if your focal participant is not doing something interesting or exhibiting the preferred actions! It is important to track the true actions of participants, even if they are not ideal to the activity’s learning goals. By getting as large a number of observations as possible, you will see a variety of actions that will be representative of possible learner outcomes during the activity.

**Coding your observations:**

- **Complete the summary sheets.** It’s a good idea to do this as soon as you can so that you remember details from your notes. If you took field notes, transfer them to the summary sheets and then complete the rest of the summary sheets. If you took notes directly on the summary sheets, move on to completing the rest of the summary sheets.
- **Debrief with your colleagues.** Consider setting up a debrief meeting to discuss your observations, such as your impressions, key takeaways, etc. This can be helpful step in determining analysis and reporting priorities.

**Analyzing your observations:**

Analysis options will depend on a variety of factors, such as the number of observations you complete, your evaluation questions, and/or the specific type of information you were looking for during your observations. Some options could include:

- If you have a large number of observations, you can count up the instances (e.g., how many times did engagement with metacognition occur across the observations?)
- If you tracked quotes, you could compile them and identify themes
- If you used the Engagement survey, you could compare self-reported learner engagement with your observed engagement (note this will only work on a group level and not matched up with individual participants, since your observations will be anonymous).