



Designation: E3313 – 24

Standard Guide for Communication of Assessor and Panel Performance¹

This standard is issued under the fixed designation E3313; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide provides guidance to sensory panel leaders on how to deliver performance feedback to trained sensory assessors and panels. This guide is not intended to be used by individual assessors or anyone unfamiliar with the panel.

1.2 This guide covers recommended feedback given throughout assessor training, panel development, and ongoing assessor and panel monitoring.

1.3 This guide examines aspects of feedback including: types, when to provide, effective delivery, and alignment to performance expectations for assessors.

1.4 Descriptive, discrimination, and quality panels are within the scope of this guide.

1.5 This guide does not cover consumer panels (qualitative or quantitative).

1.6 *Units*—The values stated in SI units are to be regarded as the standard. No other units of measurement are included in this standard.

1.7 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.8 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

¹ This guide is under the jurisdiction of ASTM Committee E18 on Sensory Evaluation and is the direct responsibility of Subcommittee E18.05 on Method Applications - Specific Uses or Assessors.

Current edition approved Feb. 15, 2024. Published February 2024. Originally approved in 2022. Last previous edition approved in 2023 as E3313 – 23a. DOI: 10.1520/E3313-24.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

E253 Terminology Relating to Sensory Evaluation of Materials and Products

E456 Terminology Relating to Quality and Statistics

E3000 Guide for Measuring and Tracking Performance of Assessors on a Descriptive Sensory Panel

3. Terminology

3.1 *Definitions*—For definitions of terms relating to sensory analysis, see Terminology E253. For terms relating to statistics, see Terminology E456.

4. Significance and Use

4.1 The procedures recommended in this guide can be used by a panel leader to provide assessors and panels feedback: (1) on their data-based performance, (2) on any behavior changes that are needed to improve their performance, and (3) to motivate assessors to remain engaged with the panel tasks. The aim of all these types of feedback is to ensure the generation of repeatable and valid data.

4.2 This guide provides direction for how to achieve mutually beneficial feedback exchanges between assessors and panel leaders.

5. Introduction to Feedback

5.1 *What Is Feedback?*—Feedback is the process of informing a trained assessor of their performance to maintain or improve repeatability and validity of their responses. For a sensory assessor or panel, feedback can be the act of a panel leader sharing or informing assessors of their own results or those of the panel or both; it can be providing positive or negative reinforcement to change or correct behaviors; or it can be acting as a “cheerleader” to instill confidence and increase motivation.

5.2 Reasons to Provide Feedback:

5.2.1 *Performance*—Providing appropriate and timely feedback on an assessor's or panel's results contributes to stable performance, performance improvement, and delivery of reliable and robust results. It can help to make an assessor more skilled at giving the same response for the same task under the same conditions.

5.2.2 *Adjusting Behaviors*—Feedback is a tool that can be used to address panel/assessor issues if behaviors or results are not as expected. For example, if the assessor has scored an

attribute much lower than the panel, resulting in a different sample rank order, then they will need feedback on how to adjust their scoring. However, the panel leader should keep in mind that, depending on the method being used, and the sensitivity of the assessors, the outlier assessor can have useful insights to contribute to the data. Feedback can also inform assessors of any corrective actions needed to address negative behaviors impacting the panel or highlight any positive impact they may have on the panel.

5.2.3 Motivation—Feedback should provide motivation for the panels/assessors to continue learning and developing their skills. It can help to increase panel/assessor credibility, confidence, and satisfaction, which can then impact the frequency, duration, and intensity of training.

5.3 Impact of Feedback:

5.3.1 Feedback can have both positive and negative effects on assessors. The choice for a panel leader to give feedback depends on the situation and the impact the feedback will have on the recipient. When delivered correctly, feedback can deliver many positive consequences such as:

5.3.1.1 More accurate, relative, and consistent results;

5.3.1.2 Psychological benefits such as an increase in assessor confidence and motivation; and

5.3.1.3 Reducing confusion, conflicts, and competition among assessors.

5.3.2 Negative consequences are also possible if feedback is given incorrectly, including:

5.3.2.1 Negative impact on results (for example, increased data variability);

5.3.2.2 Psychological effects that may create a negative environment for assessors (for example, impact on group dynamics, decrease in individual motivation) and increase panel turnover; and

5.3.2.3 Confusion for the assessor if too much, or inconsistent, feedback is given.

5.4 How to Give Feedback:

5.4.1 Initiate—The panel leader needs to think about how to initiate feedback with an assessor or panel. Feedback can be spontaneous, on a scheduled basis, one-on-one, or in a group depending on the type of feedback being given (see 5.8).

5.4.2 Plan and Formulate—If planning feedback in advance, the panel leader needs to think of the reasons for giving the feedback and outline the steps that need to be taken to deliver it. If the panel leader is giving individual feedback to an assessor, especially if giving spontaneous feedback, they need to consider their personalities, learning styles, or needs. Effective feedback involves dialog with assessors in a way that acknowledges good performance or identifies areas of improvement.

5.4.3 Exchange—Everyone has their own personality and will respond to feedback differently. It is important for the panel leader to adjust their communication style to fit the emotional needs of individual assessors at the time of the feedback. To have a successful feedback exchange with assessors or a panel, the panel leader needs to consider the following points:

5.4.3.1 Be respectful and honest. The panel leader needs to tell the assessor(s) how they are doing, where they are fantastic, and where they need help;

5.4.3.2 Assessors should be told that their feedback is a vital part in the success of the panel; and

5.4.3.3 When giving negative feedback related to performance issues:

(1) Determine from them where they think they need help and devise a plan to fix the issues,

(2) Be open-minded to out-of-the-box solutions,

(3) Give focused encouragement during the panel session if they make improvements in performance or behavior,

(4) Give deadlines for performance to meet expectations, and

(5) Use data and specific examples to support the feedback given.

5.4.4 Document—Ensure all feedback given and received is documented to support development of the assessor and also for corrective action (for example, dismissal of assessor from a panel) if needed in the future.

5.4.5 Evaluate—Use self-reflection to ensure your assessors understood the feedback and conduct a follow-up of discussed topics in feedback through observation or other discussions. Allow assessors to evaluate how feedback was given and express what worked and did not work as feedback was given.

5.5 Setting Performance Expectations for Assessors:

5.5.1 It is important to make assessors aware of the level of performance that is expected for the stage of development they are at and the role they are undertaking. Performance expectations can vary depending on if the assessor is new or experienced. The consequences of poor performance, for example, extra training sessions or even dismissal, need to be explained to assessors at the beginning of their training. For employee panels, it is important to make attendance expectations clear, how panel participation relates to their current role, and what level of performance they will need to maintain to remain on the panel.

5.5.2 To help assessors understand why their performance is monitored, the panel leader needs to clearly state the importance of quality data and the critical role the panel results play in business decisions.

5.6 When to Give Feedback—Assessors should be told that feedback can occur during training and monitoring activities. There are generally four occasions in which trained assessors require feedback: (1) training of new assessors, (2) project or product category training, (3) post-product assessment and data collection, and (4) panel monitoring and maintenance.

5.6.1 Training of New Assessors:

5.6.1.1 Newly recruited assessors with no previous experience will be learning many new skills and need slightly different feedback from that given to more experienced assessors. Regardless, if new assessors are trained in separate sessions with other new assessors before being added to a panel, or if they are added directly to an existing panel, they will need to be given information about the sensory evaluation methods they will be using, how they are progressing in developing their skills, and how well they are calibrating with other assessors. Assessors new to the panel should be made