

# DEVELOPING CHECKLISTS AND RATING SCALES

This job aid describes how to assess student performance or products using checklists and rating scales.

This job aid will help you to:

- select the appropriate tool based on the learning outcome
- create well-designed checklists and rating scales
- ensure objectivity and fairness in checklists and rating scales



## Assessing performance or products

Traditional tests are valuable but are primarily for assessing knowledge, not performance or products.

When assessing performance, you must observe the student actually performing the task, such as in a driving or swimming test, where there is no product to assess.

When assessing a product, it is not necessary to see the student make it. It is the finished product that is important. You can assess a product without knowing who made it, allowing for more objectivity.

Common tools used to assess performance or products, both formally and informally, are:

- checklists
- rating scales

Remember that it is often a good idea for students to assess themselves. This is an excellent learning activity for them and a great time saver for you.

## Checklists

### What is a checklist?

A checklist is a tool for identifying the presence or absence of conceptual knowledge, skills, or behaviours. Checklists are used for identifying whether key tasks in a procedure, process, or activity have been completed. The tasks may be a sequence of steps or include items to verify that the correct sequence was followed. You may need to observe the tasks being followed because, in general, you cannot judge what tasks the learner did from the end product. Remember that some attitudes may be indirectly observed. For example, safety attitudes can be observed by seeing if safety equipment is worn.

A checklist may also be given to students to follow in completing a procedure (e.g., in a shop or lab).

A checklist itemizes task descriptions in one column and provides a space beside each item in a second column to check off the completion of the task.

### Characteristics of checklists

Checklists should:

- have criteria for success based on expected outcomes
- be short enough to be practical (e.g., one sheet of paper)
- have tasks chunked into logical sections or flow from start to finish
- highlight critical tasks
- have sign-off points that prevent students from proceeding without approval, if needed
- be written with clear, detailed wording to minimize the risk of misinterpretation
- have space for other information such as the student's name, date, course, examiner, and overall result
- be reviewed by other instructors

Note that the criteria for success, based on expected outcomes, provide the indicators for assessing a student's achievement. In some cases, critical criteria must be met for a performance to be judged a success. These criteria often relate to safety issues or critical steps in a process or procedure.

*Checklist example 1: Jack-up procedure*

| ASTP 0001 – Shop Tools and Equipment Core Skills Assessment  |   |
|--|---|
| <b>Module 5:</b> Use Shop Tools and Equipment  |   |
| <b>Objective:</b> The student will jack up a vehicle safely using the correct equipment for the vehicle.   |   |
| <b>Instructor:</b> _____   | <b>Student ID:</b> _____  |
| <b>Student Name:</b> _____   | <b>Date:</b> _____  |
| <b>Student Signature:</b> _____  |   |
| Completed?   | Using a Floor Jack and Jack Stand   |
| <input type="checkbox"/>   | 1. Select the correct floor jack and stand for the vehicle.               |
| <input type="checkbox"/>   | 2. Block the wheels, set the transmission, and apply the parking brake.   |
| <input type="checkbox"/>   | 3. Identify the manufacturer-approved lifting points.                     |
| <input type="checkbox"/>   | 4. Place the floor jack under the lifting points                          |
| <input type="checkbox"/> _____   | <b>STOP!</b> Instructor inspection and initials needed before proceeding. |
| <input type="checkbox"/>   | 5. Jack up the vehicle.   |
| <input type="checkbox"/> _____   | <b>STOP!</b> Instructor inspection and initials needed before proceeding. |
| <input type="checkbox"/>   | 6. Lower the vehicle, remove the blocks, and return the equipment.        |
| Students: Place a check mark in each box when the task is completed. As indicated, ask your instructor to inspect your work and initial this checklist. All steps must be completed. |   |

*Checklist example 2: Learning outcomes assessment*

**Expected learning outcome:** The student will write learning outcomes that have a measurable action verb at the highest appropriate level given a “verb-level” list.

**Criteria for success:** All questions must be answered “Yes”.

| Yes                      | No                       | Writing Learning Outcomes  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Does each outcome include an action verb?  |
| <input type="checkbox"/> | <input type="checkbox"/> | Is only one action verb used in each outcome?  |
| <input type="checkbox"/> | <input type="checkbox"/> | Is each outcome measurable?  |
| <input type="checkbox"/> | <input type="checkbox"/> | Is each outcome written in terms of what the learner does, not what the instructor does? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is each outcome clear from the learner’s perspective?                                    |

### Checklist for developing a checklist

In developing your checklist, use the following checklist.

*To develop a checklist:*

- 1. Review the learning outcome and associated criteria for success.
- 2. State the level of success required for the checklist to be considered completed. In most cases, all items must be checked.
- 3. Decide on the response such as “Yes” or “No”, or simply have a box to be checked once the item has been completed.
- 4. From a procedure, process, or task description list, pick those items that are required for a good performance or product.
- 5. Group similar items or order them sequentially—keep as short as possible.
- 6. Highlight critical steps, checkpoints, or indicators of success.
- 7. Write clear instructions for the observer.
- 8. Review the task descriptions for details and clarity.
- 9. Format the checklist.
- 10. Ask for feedback from other instructors before using it with students.

## Rating scales

### What is a rating scale?

A rating scale is a tool used for assessing the performance of tasks, skill levels, procedures, processes, qualities, quantities, or end products, such as reports, drawings, and computer programs. These are judged at a defined level within a stated range. Rating scales are similar to checklists except that they indicate the degree of accomplishment rather than just *yes* or *no*.

Rating scales list performance statements in one column and the range of accomplishment in descriptive words, with or without numbers, in other columns. These other columns form “the scale” and can indicate a range of achievement, such as from *poor* to *excellent*, *never* to *always*, *beginning* to *exemplary*, or *strongly disagree* to *strongly agree*.

Some tasks, such as procedures and processes, need to be observed in order to be assessed.

### Characteristics of rating scales

Rating scales should:

- have criteria for success based on expected outcomes
- have clearly defined, detailed statements

This gives more reliable results.

For assessing end products, it can sometimes help to have a set of photographs or real samples that show the different levels of achievement. Students can visually compare their work to the standards provided.

- have statements that are chunked into logical sections or flow sequentially
- include clear wording with numbers when a number scale is used

As an example, when the performance statement describes a behaviour or quality, *1 = poor* through to *5 = excellent* is better than *1 = lowest* through to *5 = highest* or simply *1 through 5*.

The range of numbers should be the same for all rows within a section (such as all being from *1* to *5*).

The range of numbers should always increase or always decrease. For example, if the last number is the highest achievement in one section, the last number should be the highest achievement in the other sections.

- have specific, clearly distinguishable terms

Using *good* then *excellent* is better than *good* then *very good* because it is hard to distinguish between *good* and *very good*. Some terms, such as *often* or *sometimes*, are less clear than numbers, such as *80% of the time*.

- be short enough to be practical
- highlight critical tasks or skills
- indicate levels of success required before proceeding further, if applicable
- sometimes have a column or space for providing additional feedback
- have space for other information such as the student’s name, date, course, examiner, and overall result
- be reviewed by other instructors

## Considerations for numeric rating scales

If you assign numbers to each column for marks, consider the following:

- What should the first number be? If 0, does the student deserve 0%? If 1, does the student deserve 20% (assuming 5 is the top mark) even if he/she has done extremely poorly?
- What should the second number be? If 2 (assuming 5 is the top mark), does the person really deserve a failing mark (40%)? This would mean that the first two or three columns represent different degrees of failure.
- Consider variations in the value of each column. Assuming 5 is the top mark, the columns could be valued at 0, 2.5, 3, 4, and 5.
- Consider the weighting for each row. For example, for rating a student's report, should the introduction, main body, and summary be proportionally rated the same? Perhaps, the main body should be valued at five times the amount of the introduction and summary. A multiplier or weight can be put in another column for calculating a total mark in the last column.

Consider having students create the rating scale. This can get them to think deeply about the content.

*Rating scale example 1: Interpersonal skills assessment*

| <b>COMM 0001 – Business Communications</b>  |                   |                     |                      |                   |                        |
|---|-------------------|---------------------|----------------------|-------------------|------------------------|
| Objective: The student will demonstrate the ability to work well with other people. |                   |                     |                      |                   |                        |
| Criteria for success: Each statement must be at a level of "Average" or better.     |                   |                     |                      |                   |                        |
| Instructor: _____   |                   |                     | Date: _____          |                   |                        |
| Student name: _____   |                   |                     | Student ID: _____    |                   |                        |
| <b>Team Skills</b>  | <b>Poor<br/>1</b> | <b>Weak<br/>2.5</b> | <b>Average<br/>3</b> | <b>Good<br/>4</b> | <b>Excellent<br/>5</b> |
| People skills   |                   |                     |                      |                   |                        |
| Communication skills  |                   |                     |                      |                   |                        |
| Contribution to the work done   |                   |                     |                      |                   |                        |
| Contributions to meetings   |                   |                     |                      |                   |                        |
| Arrives on time to meetings   |                   |                     |                      |                   |                        |
| Based on team agreement, place a check mark in the appropriate box in each row.     |                   |                     |                      |                   |                        |
| Comments:   |                   |                     |                      |                   |                        |

*Rating scale example 2: Practicum performance assessment*

**Expected learning outcome:** The student will demonstrate professionalism and high-quality work during the practicum.

**Criteria for success:** A maximum of one item is rated as “Needs improvement” in each section.

| Performance area  | Needs improvement | Average | Above average | Comments |
|---|-------------------|---------|---------------|----------|
| A. Attitude   |                   |         |               |          |
| • Punctual  |                   |         |               |          |
| • Respectful of equipment   |                   |         |               |          |
| • Uses supplies conscientiously   |                   |         |               |          |
| B. Quality of work done   |                   |         |               |          |
| • ...   |                   |         |               |          |
| Above average = Performance is above the expectations stated in the outcomes.<br>Average = Performance meets the expectations stated in the outcomes.<br>Needs improvement = Performance does not meet the expectations stated in the outcomes. |                   |         |               |          |

*Rating scale example 3: Tools handling assessment*

**Expected learning outcome:** The student will select the proper tool for each task and use it both skillfully and safely.

**Criteria for success:** All skills must be performed “Average” or better.

| Skill                    | Unacceptable<br>0 | Weak<br>2.5 | Average<br>3 | Good<br>4 | Excellent<br>5 | Weight       | Score |
|--------------------------|-------------------|-------------|--------------|-----------|----------------|--------------|-------|
| Selects the proper tool  |                   |             |              |           |                | 1            |       |
| Uses the tool skillfully |                   |             |              |           |                | 5            |       |
| Uses the tool safely     |                   |             |              |           |                | 2            |       |
|                          |                   |             |              |           |                | <b>Total</b> |       |

*Rating scale example 4: Computer program quality assessment*

**Expected learning outcome:** The student will write efficient, documented, error-free computer programs that meet the specifications.

**Criteria for success:** A maximum of one item is rated as “Below expectations”.

| Computer Program  | Below expectations | Meets expectations | Exceeds expectations | Comments |
|---|--------------------|--------------------|----------------------|----------|
| Achieves what it was designed to do   |                    |                    |                      |          |
| Operates without errors   |                    |                    |                      |          |
| Source code is efficient  |                    |                    |                      |          |
| Source code is well-documented  |                    |                    |                      |          |
| <p>Exceeds expectations = Performance is above the expectations stated in the outcomes.</p> <p>Meets expectations = Performance meets the expectations stated in the outcomes.</p> <p>Below expectations = Performance does not meet the expectations stated in the outcomes.</p> |                    |                    |                      |          |

*Rating scale example 5: Written report assessment*

**Expected learning outcome:** The student will write a report that recommends one piece of equipment over another based on the pros and cons of each.

**Criteria for success:** All items must be rated as “Weak” or above.

| Report       | Unacceptable<br>0 | Weak<br>2.5 | Average<br>3 | Good<br>4 | Excellent<br>5 | Weight       | Score |
|--------------|-------------------|-------------|--------------|-----------|----------------|--------------|-------|
| Introduction |                   |             |              |           |                | 1            |       |
| Main Body    |                   |             |              |           |                | 5            |       |
| Summary      |                   |             |              |           |                | 1            |       |
|              |                   |             |              |           |                | <b>Total</b> |       |



*Rating scale example 6: Presentation performance assessment*

**Expected learning outcome:** The student will give a presentation that defends their marketing approach for their assigned product.

**Criteria for success:** Only one item is rated less than “Slightly agree”.

| Presentation Skill                 | Strongly disagree | Disagree | Slightly disagree | Slightly agree | Agree | Strongly agree |
|------------------------------------|-------------------|----------|-------------------|----------------|-------|----------------|
| His/her voice was clearly heard    |                   |          |                   |                |       |                |
| His/her tone of voice was varied   |                   |          |                   |                |       |                |
| The pace was appropriate           |                   |          |                   |                |       |                |
| The language level was appropriate |                   |          |                   |                |       |                |

### Checklist for developing a rating scale

In developing your rating scale, use the following checklist.

*In developing a rating scale:*

- 1. Review the learning outcome and associated criteria for success.
- 2. Determine the scale to use (words or words with numbers) to represent the levels of success.
- 3. Write a description for the meaning of each point on the scale, as needed.
- 4. List the categories of performance to be assessed, as needed
- 5. Clearly describe each skill.
- 6. Arrange the skills in a logical order, if you can.
- 7. Highlight the critical steps, checkpoints, or indicators of success.
- 8. Write clear instructions for the observer.
- 9. Review the rating scale for details and clarity.
- 10. Format the scale.
- 11. Ask for feedback from other instructors before using it with students.

## References

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