





GUIDANCE ON PRODUCING SITUATIONAL JUDGEMENT TESTS

The Institute for Apprenticeships and Technical Education has recognised NSAR Limited as the external quality assurance provider for a range of Adult Care apprenticeship standards. We implement an employer-led model for external quality assurance directed by the Adult Care Apprenticeship Quality Board.



INTRODUCTION

Situational judgement tests are common forms of assessment used in recruitment and personnel selection and some other areas like assessment programmes in the medical profession. These tests tend to involve:

- Multiple choice questions with the potential to have more than one correct answer, and the test taker asked to identify each correct option
- Ranking questions, where options are ranked from most to least appropriate

In both these types of questions, there can be multiple marks available for either identifying all of the correct responses in a single question, or for arranging the options in the correct order.

This is **not** how the situational judgement test works in adult care apprenticeship end-point assessment. The 60 question for 60 marks requirement within the assessment plan prevents the use of multiple response items, i.e. items that carry more than one mark. For example, when asked to identify the most and least appropriate responses.

WHAT THE ASSESSMENT PLANS SAYS

The situational judgement test will present the candidate with a range of real-life scenarios about which the learner will have to answer questions in a multiple choice format (60 questions). (Level 2, page 4; Level 3, page 4)

Within adult care, the approach is clear – 60 questions in the multiple choice format. This is not like how SJTs may be structured elsewhere, and it does not necessarily mean that there needs to be 60 different situations (scenarios), but it does mean that there has to be 60 questions with the apprentice required to identify the correct or most appropriate answer for one mark.

ANATOMY OF A SJT MCQ

Question	Item
1. You are sitting with a service user, who you have supported for some time. The individual has Alzheimer's and has recently started to believe that you are a family member. During the course of your conversation they start to refer to you by their family member's name. What would you do in this situation?	Stem (Scenario)
a. Allow them to call you by another person's name, rather than correct them.	Distracter/Incorrect answer
b. Correct them each time, in order to encourage them to recognise of your face.	Distracter/Incorrect answer
c. Gently correct them, but stop and change the subject if they become upset.	Key/Correct answer
d. Apply for a change of carer for them, to avoid any extended period of confusion	Distracter/Incorrect answer



In adult care, the SJT must use items that involves either a single correct answer or adopts the 'best answer' approach. With regard to the 'best answer' approach the options (distracters) differ in their degree of 'correctness', i.e. some may be completely incorrect and some correct, but one is clearly more correct than the others. Here the apprentice would be required to identify the best answer.

EXAMPLE OF A SINGLE CORRECT ANSWER ITEM INVOLVING APPLICATION OF KNOWLEDGE AND/OR SKILLS

- 1. On a recent home visit you notice that Jamie, who you have been supporting for some time, has been finding it difficult to move around the house without tripping over. You are concerned about their safety, and need to update the risk assessment. What is the first stage of the process?
 - a. Decide who might be harmed and how.
 - b. Record and implement findings.
 - c. Review the assessment.
 - Identify the possible hazards.

(correct answer: d)

EXAMPLE OF A SINGLE CORRECT ANSWER ITEM INVOLVING ANALYSIS, SYNTHESIS AND EVALUATION AND A JUDGEMENT

This type of question is based upon a hypothetical situation and asks the learner to use their knowledge in order to make judgments. These questions often involve a scenario and require integration of knowledge and decision making. Sometimes the apprentice must decide the most appropriate steps to take, given a hypothetical case or situation.

1. You discover that a service user you are visiting has just suffered an injured ankle while moving around their home. You question the service user about how the injury occurred and about the area affected. You examine the indicated area. The symptoms are typical of a sprained ankle, although the injury may in fact be more severe.

Which of the following steps should be included in the first aid administered to the service user?

- **I.** Elevate the injured leg.
- II. Apply ice to the injured area.
- **III.** Apply direct pressure to the site of the injury.
 - a. a. i only.
 - b. b. ii only.
 - c. c. i & ii only.
 - d. d. i & iii only.

(correct answer: c)



CONSTRUCTING OR DESIGNING THE STEM (THE SCENARIO)

This is the part of the question that sets up the scenario or situation that requires the correct or most appropriate response from the apprentice. This moves the assessment beyond straightforward recall of facts and towards an apprentice's ability to think critically, and make appropriate decisions.

The apprentice should be presented with a range of work-based situations, that are reflective of the environments within which they are likely to find themselves within their role, and will be asked to choose the most appropriate action or solution from the choices provided.

WHAT THE ASSESSMENT PLANS SAYS

Questions will draw from the stated knowledge and skills elements of the standard and focus on the higher order competencies. (Level 2, page 4; Level 3, page 4)

The assessment approach, through the stem, is looking to replicate a decision, or judgement call, that they may have to make in their workplace. They could encounter this sort of situation (as described in the question stem) within a care environment.

The test items, when put together to create a test, will need to:

- · Cover the range of different care environments
- Address the range of different service users
- Cover scenarios that address the main tasks and responsibilities of the occupation
- Adequately cover the application of all the knowledge requirements in the standards
- Show the apprentice can communicate clearly and responsibly¹

EPAOs need to consider how they access the relevant occupational expertise needed to ensure these conditions above are met.

Adult Care SJT Guidance v13 (FINAL)

¹ With regards to communication within the SJT assessment context, this should be interpreted as applying the correct reporting procedures, information exchange and communication tools and processes involved with the occupational role, e.g. care plan, risk assessments and so on.



TOP TIPS WHEN WRITING A STEM:

The structure of a robust SJT question starts with a quality scenario (stem). The following provides some tips, to guide you in writing concrete scenarios that are both believable, relevant, and effective:

- 1. Understand the Role | To write a robust scenario you must understand the skills, knowledge, and behaviours that the apprentice is expected to possess, in order to determine how the scenario should be framed and presented.
- 2. Use Relevant & Realistic Situations | Make the scenarios as real as possible. The scenario is about telling a story, with characters and situations. The scenarios need to be believable and relevant, within the context of their experiences and learning over the course of their apprenticeship.
- 3. Motivate the Apprentice | The scenario needs to be framed in a way that encourages and provides the apprentice with the confidence to feel that they can solve the problem. The relevance and value of the scenario and the context helps with motivation.
- 4. Challenge the Apprentice | The best scenarios will present a problem or situation, provide some clues for the apprentice to identify, and enable the selection of an appropriate answer. The scenario should not overwhelm in its level of challenge, provoking a guess. The best way to reflect on the level of challenge within a question is to confirm a link back to the standard, confirm the question is appropriate to the apprenticeship level (both in terms of role expectations and language used), ensure the scenario is realistic and pilot it with suitable parties.
- 5. **Stem Format** | Stem questions, following the scenario, should be prepared as questions, as opposed to statements. E.g., "What is the correct action to take here?" as opposed to "In this situation you need to:" Negative questions should also be avoided.
- 6. **Get the Language Right |** The language of the scenario and stem should be appropriate to the apprenticeship level, and conscious of the role expectations. Conversational/informal language is recommended, and clarity is of paramount importance. If the apprentice is struggling to understand the scenario presented, they will be disadvantaged when making their selection.
- 7. Concise, but sufficient | The scenario length should be considerate of the assessment expectations and enable sufficient time for an appropriate judgment to be made. You don't want the apprentice to spend most of the assessment reading scenarios and not have enough time to consider their course of action. Equally, there needs to be enough information included to enable an appropriate judgment.

If the answer 'it depends' could be the most suitable (and this isn't structured as an available option) then it is likely that more detail is needed to set up the context. This could be more detail in terms of the care environment and/or the service user.

Multi-context scenarios are fine, i.e. generic scenarios common to all or most care settings or service users, provided the answer doesn't vary depending on the care environment or service user.



- 8. **Be Consistent |** The structure, level of detail presented, general scenario length, and language used should be consistent across the bank. There is no fixed structure to a scenario; some may use names, some may refer to roles, some may have longer scenarios covering multiple judgment questions and others may have shorter scenarios for each question. All of this is acceptable, you just need to be consistent in the approach and clear as to expectations.
- 9. Check It Is Accessible & Fair | Assessment fairness is fundamentally about ensuring the questions are considerate of the individual, irrespective of their background, needs, or individual characteristics. Scenarios should be equally familiar to all and use words that have a common meaning to all. Focusing on a particular care environment/s or user type/s may not be fair to an apprentice with limited experience within that setting or with those service users.

The language used should also be considered in terms of fairness. For example, 'Stroke victim', was a term seen in some assessments. The term 'victim' could be considered to be a pejorative term.

Neutrality and impartiality in language should not be assumed, as it will be reflective of the writer's own perceptions, biases, and prejudices; unconscious or otherwise. Asking a variety of people, with diverse perspectives, to review the assessment materials will help ensure the scenarios are clear and appropriate. Trialling with small groups is another option to help mitigate potential risks.



THE OPTIONS (KEYS AND DISTRACTERS)

Whilst the stem sets up the scenario and context that the apprentice is being asked to understand, the options outline the potential judgements that you would like the apprentice to consider. The option representing the best judgement or the correct response by the apprentice, given the scenario, is referred to as the key (answer). The other options are referred to as distracters, and their role is to draw apprentices with only partial knowledge or no knowledge of the answer away from the correct response.

Distracters are probably the most difficult part of the assessment to develop because, in order to be effective, they have to be plausible. Distracter performance in the recent Adult Care SJT review highlighted distracter quality as being a common weakness across the assessments reviewed.

For distracters to be fit for purpose, they will need to be written by content specialists to ensure plausibility. Distracters have a direct impact on the quality and learning outcomes. The plausibility needed, means that the assessment writer needs to consider the effects that partial knowledge in an area might have on an apprentice's answer.

Distracter Development, Considerations, and Tips

There are two general strategies advocated for distracter development; the first being to create a list of plausible but incorrect alternatives, linked to common misconceptions or errors in thinking, reasoning, and problem-solving. The second strategy is focussed on creating distracters that are similar in content and structure relative to the correct answer (e.g. use of quantitative values, option length, complexity formatting & structure).

The most effective way to develop plausible distractors is to build an understanding of what the apprentice will be thinking when the stem is presented and build a picture of common errors. Ask yourself the question. "What is a common issue people have in solving this problem?" or "what are the common misconceptions about this?". Being able to identify common challenges, or plausible alternatives, is where having good subject knowledge and recent operational experience becomes of paramount importance. Reviewing on-programme evidence for apprentices, speaking directly with employers and providers, reviewing the expectations within the standard, and running pilots and trials can all help to establish an understanding of common pitfalls and misinterpretations of practice.

The other factor to consider when developing distractors is the availability of a sign-off mechanism that ensures consistency in both the approach, structure, challenge, and overall quality.



When looking at the distracter quality, there are a few features that can unduly influence the apprentice's selection process when looking for the correct response. You should avoid them so that your items don't influence apprentices, inadvertently:

- 1. Use plausible distractors | Options which are not plausible should not be included.
- 2. Use common errors or misconceptions that apprentices have | It is important to have a single 'best' answer. This doesn't mean that there can't be elements of good practice in distracters but there should not be two options that are equally appropriate.
- 3. **Avoid technically phrased distractors** | A lack of clarity or inconsistency in the language used can have a negative impact on judgements made. The difficulty level of the item should not depend on obscure words or unintentional cues in the stem.
- **4. Avoid the use of humour | It** may be tempting to introduce humour into the assessment, however if it is too easy for the apprentice to eliminate an option or two, the question loses it measurement value.
- 5. **Keep distractors independent of each other** | Distractors should not overlap: The scenario, stem, key, or distracters in one question, should not provide or indicate the answers in another. The item should be interpreted by all apprentices in the same way.
- 6. **Keep distractors homogeneous in their content & structure** | The placement of the key should be balanced across the assessment.
- 7. **Keep length of distracters about the same |** Noticeably longer options tend to be considered as more plausible by candidates.
- 8. "None of the above" and "All of the above" should be used judiciously | Extreme language should be avoided (always, never, only)
- 9. Avoid giving clues to the correct answer | Adverbs, like 'usually', tend to be perceived as more probable than more definitive words like always, none, or all. The solution would be to either use definite terms or indefinite terms but not both. Lack of care in how grammar is used can also give clues or mislead apprentices. For example, with a subject-verb agreement (use of singular or plural in the stem) with only the key or a single distractor grammatically correct would mislead. Or use of 'a' or 'an' in the stem with the correct answer set up as a grammatically correct response to the stem will also influence the test taker. Distracters that have the same keyword used in the stem also tend to be selected by candidates
- 10. Phrase distracters positively, avoid negatives | There is evidence to suggest that individuals often answer negatively worded questions as though they were positivity phrased, reducing the overall validity of the assessment measure (i.e. they miss the fact that it is set up as a negative). Negatively worded questions can sometimes be more convoluted and can increase the level of challenge for those for whom English is not their first language. This can also be an issue if you choose to use the passive voice in writing items.



CHECKING THE QUALITY OF YOUR SJT ITEMS

Editing is a key quality control function ensuring that items when assembled are of the quality required and expected.

When using your quality processes to look at the quality of the tests overall, it is worth considering:

When looking at the test or how the test is put together	Is there a suitable range of care settings?
	Does the SJT cover a range of service users?
	Are all the areas assigned to the SJT in the assessment plan covered?

When using your quality processes to look at the quality of the items, it is worth considering:

being covered by the SJT? Is the item pitched at the right level?	Is each item and all the options based on the content of the standard identified as being covered by the SJT?
	Is the item pitched at the right level?
	Will the focus or content come as a surprise to the trainer, apprentice or employer?
	Is the language clear, accessible and free of ambiguity?
	Is there only one correct answer (Key)?

When using your quality processes to look at the quality of the distracters, it is worth considering:

Are they plausible?
Do they contain at least one option that is a common mistake or misconception made by apprentices?
Are all independent of each other?
Are all the same length, more or less?
Are all positively phrased?
Are all clear, accessible and unambiguous?



A VERY BRIEF LOOK AT ITEM ANALYSIS FOR THE SJT

This section is a basic introduction to item analysis to help get those who need it started. One of the major advantages of objective questions is that they can and should be analysed. If you know the performance properties of each item, then you can construct better tests and adjust for poor performance.

There are two important measures here: measuring item difficulty and measuring how well items differentiate between different apprentice abilities or knowledge.

MEASURING ITEM DIFFICULTY: FACILITY VALUES

Item difficulty is also called item facility. If you think of facility as easiness, then a high value means high easiness. However, almost everyone refers to it as difficulty, so a low value means a hard item. This is also sometimes called the item difficulty index. Facility or difficulty, it is represented as a *P* value.

Facility value represents the proportion of apprentices answering the item correctly and is expressed as a number between zero and one.

Difficulty is an important factor in evaluating the characteristics of an item and whether it should continue to be part of the situational judgement test. Items can be abandoned if they are too easy or too hard. It also allows us to better understand how the items, and test as a whole operate as an assessment instrument.

The easiest way to calculate the facility value (P) of an item is:

The number of apprentices choosing the correct answer / total number of apprentices answering the item

A facility value of:

- **Zero** means that no-one answered the question correctly the item is problematic. It could be too hard, faulty, or badly written.
- one means that everyone got the item right; it is too easy.
- **0.5** means that 50% of the test takers answered it correctly this is okay.

The lower the facility value, the more difficult the item - a very difficult item might have a facility value of 0.1 (10% of apprentices will be expected to answer it correctly. As such, it needs reworking or to be discarded).

The higher the facility value, the easier the item - a very easy item might have a facility value of 0.9 (90% of candidates will be expected to answer it correctly – it should be reworked or discarded).

The window for reasonable performance of an item is when there is a facility value of between 0.4 and 0.7.



MEASURING AN ITEM'S ABILITY TO DIFFERENTIATE: DISCRIMINATION INDEX (DI)

The discrimination index of an item is a measure of how well an item separates out apprentices taking the SJT. It relates each apprentice's overall SJT score with their performance on each specific item, and then compares the higher scoring apprentices with the lower scoring apprentices.

You can use item discrimination as a measure to evaluate how well an item sorts apprentices that have mastered the material from apprentices that have not. Apprentices with mastery of the material should be more likely to answer a question correctly, whereas apprentices without mastery of the material should get the question wrong.

There are a few different ways to `calculate item discrimination, but a more straightforward way is shown below.

One way to calculate the discrimination index

If 30 candidates attempt an item, the discrimination index compares:

- the performance of the top third (top 10) of the apprentices (based on final test scores)
- with the bottom third (bottom 10) of apprentices (based on final test scores)

If **eight** of the top ten answered an item correctly and **two** of the bottom third answered it correctly then the item's DI is:

Discrimination index = (8-2)/10 = 6/10 = 0.6

Interpreting the results of discrimination calculations:

- Discrimination index values range from +1 to -1
- A discrimination index value of **+1** means that all of the top candidates answered it correctly and none of the bottom candidates
- A discrimination index of **-1** means that all of the bottom candidates answered it correctly and none of the top candidates did.
- A discrimination index of **zero** means that the same number of top and bottom students answered it correctly.

Negative discrimination indicates that apprentices who are scoring highly on the rest of the test are answering that question wrong. This could mean that there is a problem with the question e.g., bias or a mistake with the key (correct answer).



What to look for:

- A positive discrimination index means the item will help with grading (i.e. it shows some discrimination).
- If an item shows a zero or negative discrimination, it is not performing as it should.
- It recommended that an item has a discrimination index of at least 0.2 and items with values of 0.4 and above are considered to have good discrimination.

Discrimination indices cannot be predicted. They must be derived through pre-testing or operational use, and form a key way to understand what impact your tests and individual test items are having by understanding more about their performance.

PUTTING IT ALL TOGETHER

A "good" question that is designed to be difficult will have a **low facility value and high discrimination**. However, not all questions with low facility values will have high discrimination indices. For example, a poorly designed question that is difficult to answer, perhaps due to lack of clarity or inappropriate language, may have a low facility and low discrimination. In this circumstance few apprentices can answer it and poorer performing apprentices are as likely to get it right as good apprentices.



EXAMPLES OF GOOD PRACTICE | LEVEL 2

The following questions have been identified, by sector and assessment experts, as representing best practice for the Level 2 Situational Judgement Test in adult care. The questions have been selected as they present appropriate scenarios, possess plausible and fit for purpose distracters, and are written in an accessible and fair way. The examples presented vary in their style, however the final 'banks' used by EPAOs should adopt a consistent style and format across all 60 questions.

- 1. You are sitting with a service user, who you have supported for some time. The individual has Alzheimer's and has recently started to believe that you are a family member. During the course of your conversation they start to refer to you by their family member's name. What would you do in this situation?
 - a. Allow them to call you by another person's name, rather than correct them.
 - b. Correct them each time, in order to encourage them to recognise of your face.
 - c. Gently correct them, but stop and change the subject if they become upset.
 - d. Apply for a change of carer for them, to avoid any extended period of confusion.
- 2. On a recent home visit you notice that Jamie, who you have been supporting for some time, has been finding it difficult to move around the house without tripping over. You are concerned about their safety, and need to update the risk assessment. What is the first stage of the process?
 - a. Decide who might be harmed and how.
 - b. Record and implement findings.
 - c. Review the assessment.
 - d. Identify the possible hazards.
- 3. Leslie has partial hearing and a moderate learning disability. They can become frustrated if people leave them out of conversations. What should you do when you are talking to another service user in front of them?
 - a. Be aware of their preferred methods of communication and ensure that they are actively supported to be involved in conversations.
 - b. Change the focus of the conversation, so they can be included and do not feel left out or become frustrated.
 - c. Spend at least an hour each day communicating with them away from everyone else. You want to make sure that they feel that they have been included.
 - d. Do your best to include them where possible and make them understand that sometimes they will not be involved.
- 4. A service user has dementia and type 2 diabetes. They are not keen on diets and do not like vegetables. You have asked them to tell you what food they like, so they can make choices for their meal plan. What is the best way of using this information to support them?
 - a. To have a good understanding of what they like, so that you can find healthy alternatives.
 - b. To work out the areas in which their diet is lacking, and make up for them with healthy snacks.
 - c. To support decision making, and ensure a person centred approach is taken.
 - d. To ensure that all healthy choices are listed, and to persuade them to eat vegetables.



- 5. Whilst you are visiting a service user in their home, you meet a district nurse who is visiting at the same time to administer insulin to the individual. You notice, after they've administered the injection, that they have disposed of the used needle by dropping it in the servicer user's own bin. What will you do next?
 - a. Dispose of the waste in the sharps box.
 - b. Inform your line manager of the practice.
 - c. Take away the waste as soon as possible.
 - d. Inform the district nurse of the appropriate practice.

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EXAMPLES OF GOOD PRACTICE | LEVEL 3

The following questions have been identified, by industry and assessment experts, as representing best practice for the Level 3 Lead Adult Care Worker Situational Judgement Test. The questions have been selected as they present robust scenarios, possess plausible and appropriately challenging distracters, and are written in an accessible and fair way. The examples presented vary in their style, however the final 'banks' used by EPAOs should adopt a consistent style and format across all 60 questions.

1. A recent inspection, for a residential care setting, highlighted some concerns about practice during mealtimes that had the potential to leave individuals at risk from inadequate nutrition and hydration.

Which one of the following measures should you put in place to prevent unsafe practice?

- a. Make sure there is more than enough food available to feed everyone.
- b. Provide nutritional supplements before meals.
- c. Monitor how much food and fluids individuals consume.
- d. Allocate an adult care worker to assist in the dining room.
- 2. An adult care worker was preparing a cup of tea for a service user, when they tripped over and badly hurt their ankle. An ambulance was called, and the care worker was taken to hospital for treatment.

Which one of the following actions should you take first, as lead adult care worker, to ensure the safety and wellbeing of the team?

- a. Implement measures to prevent further accidents.
- b. Arrange cover for the rest of the shift.
- c. Fill in the accident book, to make sure it is captured.
- d. Call the care worker's family to let them know what happened.
- 3. You are working closely with another team member, and they mention that they have spotted a bruise on a service user that was not previously recorded. You have concerns that the service user may have been abused. What is the first action that you, as the lead adult care worker, should take?
 - a. Address concerns with the individual.
 - b. Report as a safeguarding concern.
 - c. Share concerns with another colleague.
 - d. Ask the staff member to complete an incident form.



4. A new adult care worker has just joined the team, and you have been asked to introduce them to the service users.

Which of the following do you need to do, before any treatment is provided by the new adult care worker?

- a. Give service users some extra guidance.
- b. Provide service users with a choice of carer.
- c. Ask the service user what they think about them.
- d. Gain consent from each of the service users.
- 5. You arrive on shift to find out that one of the residents has been aggressive and was locked in the small lounge. What would you expect the member of staff, who was responsible for locking them in, to be told?
 - a. That the actions were appropriate, as the resident is a clear danger of harming the other residents.
 - b. That the actions were appropriate, as the care plan allows the resident space to reflect on their behaviour.
 - c. That the actions were inappropriate, as this is classed as restrictive practice and against human rights.
 - d. That the actions were inappropriate, and could further inflame the resident, staff, and others.

If you have any questions, or would like any further information, please do not hesitate to contact us using
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