

Assessment Fact Sheet: Constructed Response Assessments (Essays)

This fact sheet describes the use of constructed responses as methods of assessing learning. Topics covered in this fact sheet include:

- the features of constructed response assessments
- the strengths and limitations of constructed response assessments
- best practice principles to inform selection and guide construction of constructed response assessments.

Features of constructed response assessments

Constructed response assessments are typically characterised by lengthy responses to questions posed.¹ Constructed response assessments are most commonly referred to as essays.

Essays can be used to require learners to:

- analyse and/or integrate different ideas or points of view
- contrast or compare theories or ideas
- develop a logical argument
- evaluate views or ideas
- demonstrate creativity
- apply what has been learnt in real life situations
- substantiate their own views.²

Essay questions can be classified into two types:³

- Restricted response essays; limit both content and response as indicated within the question. The restricted response essay addresses a limited sample of the curriculum or learning outcomes.⁴ The restricted response essay may commonly be known as:
 - Problem solving exercises; focus on solving a problem and decision making processes. In nursing contexts, clinical data is presented and the learner must demonstrate their ability to assess, analyse, plan, implement and evaluate.⁵
 - Case studies; present certain, but not all, key elements of a clinical situation resembling real-life scenarios. The learner must combine these elements with information acquired from previous educational experiences. With additional resources the learner works through a sequence of increasingly complex activities.
 - Other terms may be used to describe these assessment methods, they include scenario-based activities or context- dependent item sets.⁷ These methods share many similarities and are said to be helpful in developing critical thinking skills and in synthesising and applying nursing knowledge to practice.^{8,9}
- Extended response essays; considered a form of performance assessment¹ or complex achievement.⁴ These essays provide the freedom of response to a question and assess the ability to research a topic, creatively organise, integrate and evaluate ideas, and construct an argument.^{4,10} An extended response essay normally includes the following subsections:
 - an introduction
 - the body of essay
 - a conclusion
 - reference list
 - appendices.
- There are adaptations to the extended response essay. Assignments or reports can communicate information which has been compiled as a result of research and analysis of data and of issues. Reports can cover a wide range of topics, but usually focus on transmitting information with a clear purpose, to a specific audience. Often reports are structured in a way that reflects the information finding process and include the following subsections:
 - summary of the contents
 - introduction or background
 - methods
 - results
 - discussion
 - conclusion and/or recommendations.¹¹

Strengths and limitations of constructed response assessments

Strengths	Limitations
<p>Practicality and usability</p> <ul style="list-style-type: none"> • Essays have been used in nursing/biological science contexts to assess learning for a number of decades.^{12,13} • Carefully constructed essay questions measure complex learning outcomes or attributes that cannot be measured by other means⁴ such as motivation, attitudes towards change, and reflection on development.¹⁴ • Essays emphasise the integration of thinking and problem solving, learners must generate a response not just identify the correct response.⁴ • Essays enable direct evaluation of writing skills, information literacy and critical analysis skills.^{4,13,15} • The process of writing an extended response essay may be an effective learning exercise.⁴ • Construction of essay questions is easier than multiple choice questions, the experienced writer can produce up to four case based questions an hour.¹⁵ <p>Reliability and Validity</p> <ul style="list-style-type: none"> • Essays provide valid assessment of how well learners can summarise, find relationships between data and apply known procedures to new situations.¹⁵ • Case studies or scenario based activities have good face validity for clinical nurses.¹⁵ • Essays may have good face validity as they closely emulate writing tasks within the field of nursing: <ul style="list-style-type: none"> · documentation in patient histories · the use of scientific conventions · conformity to journal styles · preparation of ethic applications, research proposals and abstracts.¹³ • Restricted response essays enable the development of more reliable and valid grading procedures.³ 	<p>Discrimination</p> <ul style="list-style-type: none"> • Constructed response assessments may favour individuals with English speaking backgrounds or advanced language skills.¹⁶ • Significant differences exist in the amount of time spent in preparation and completion of essays, however learners who devote longer time to preparation do significantly better. Constructed response assessments may favour learner's with more time.¹² <p>Practicality and usability</p> <ul style="list-style-type: none"> • Essays provide limited sampling of the curriculum.⁴ • Construction of essay questions, particularly those using case studies are time consuming; it is estimated that inexperienced educators may need up to three hours to produce a single case with questions.¹⁵ • Marking of essays can be difficult³ and very time consuming⁴ particularly with increasing numbers of learners.¹² • Markers require high level language skills.¹³ • The provision of feedback can be resource intensive.¹³ • In most situations essay writing is a solitary activity and typically does not assess teamwork skills.¹² <p>Reliability and Validity</p> <ul style="list-style-type: none"> • Most commonly cited limitation of the essay question is the unreliability of marking. Studies have shown that essays are scored differently by different markers and are even scored differently by the same marker at different times.^{4,17} • Because of their unique and interpretive nature, there is no single definitive answer that can be applied to all essay responses when marking.¹ • Essays may contain many distracting factors that contribute to subjective scoring: <ul style="list-style-type: none"> · presentation · writing style, sentence structure and flow · spelling and grammar · identity of the learner · location of essay in the pile of essays · marker fatigue.¹ • As learners become more experienced or aware of educator/trainer expectations, the learner becomes better able to match these expectations therefore the essay may reflect awareness of conventions and norms of essay writing rather than understanding of content or critical thinking skills.¹²

Best Practice Principles

Preparation and Construction

- Essay questions should measure the achievement of clearly defined learning objectives.⁴
- Careful attention should be given to the design of essay questions so that the learner is left in no doubt as to what is being asked.^{4,12}
- Restricted response questions will be easier to assess objectively⁴, otherwise include word limits or other parameters to focus the question.¹
- Define what constitutes a satisfactory answer before administering an essay question.¹
- Decide how to manage distracting factors that may contribute to subjective scoring: i.e. presentation, spelling and organisation and inform the learners of any penalties that apply.¹
- Devise scoring criteria (see Appendix 1: Scoring criteria) and distribute along with essay question

In the following example of a restricted-response essay question taken from EdCaN Breast Cancer case study. [Learning activity 3 from www.cancerlearning.gov.au/edcan_resources/#/xml/module_3/casestudies/breast_cancer/during_active_treatment/systemic_therapies.xml&popup=xml/module_3/casestudies/breast_cancer/during_active_treatment/systemic_therapies_activities.xml] Parameters focus the question and limits are carefully set to guide responses:

Compare Aromatase Inhibitors and anti-oestrogens therapies in the management of breast cancer on the following criteria:

- Indications for use (tumour related factors and menopausal status).
- Side effects

Using the verb 'compare' requires that the response must distinguish between the two therapies. Higher quality responses would also put the two pieces of information together to form a new understanding

A response should be limited to use of these therapies in breast cancer only

The specification of the criteria provide focus for the essay response

Evaluation and review

- If possible, mark essays anonymously.¹
- If the essay has several parts or multiple questions, score all answers to first question before moving on the second question to ensure consistency of marking and prevent the influence of subsequent wrong answers.¹
- Have a second marker review a sample of the essays to check for objectivity and check for inter-rater reliability.¹
- Critical review of the essay question is best facilitated by a colleague with experience in essay question construction.¹⁸
- The provision of a marking guide should be included when reviewing a question to ensure that the expected response matches the question (see example in see Appendix 1: Scoring criteria).

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Appendix I: Example of scoring criteria for restricted response essay

For each of the characteristics (listed on left of table), circle responses that best describe the essay. Add numbers within each circled response together to determine the overall rating (below).

Characteristics of essay		Quality		
Organisation of ideas	Intention to compare therapies clearly stated at beginning and reinforced throughout (4)	Intention to compare therapies implied throughout (3)	Intention to compare therapies is vague, significant digressions from topic (2)	No apparent intention/focus (1)
Accuracy of content with reference to evidence	Information current, accurate and based on a variety of quality citations (4)	Occasional minor inaccuracies, one or two major citations heavily relied upon (3)	Old data used, frequent inaccuracies, limited citations (2)	Many inaccuracies, no reference to the literature (1)
Depth of understanding	Extensive discussion of both criteria (indications for use and side effects) to demonstrate the comparison of therapies. Synthesis evident (4)	Extensive discussion of one criteria, restricted discussion of second criteria (3)	Restricted discussion of one criterion, limited discussion of second criteria. Paraphrasing ideas into own words (2)	Limited discussion of both criteria (indications for use and side effects). Understanding not demonstrated (1)
Grammar/ Expression	Fluent expression, no major errors (4)	Coherent expression, one or two minor errors (3)	Disjointed, many errors interfering with reader understanding (2)	Many errors causing reader distraction (1)

Overall Rating	
13 – 16	Exceptional achievement
9 – 12	Adequate achievement
7 – 8	Limited evidence of achievement
4 – 6	Minimal evidence of achievement