

LOAM TOOL ATTRIBUTE SCORING CRITERIA

1. Interactivity

1.1 Definition

The level of interactivity or the extent to which the learner can engage actively with the learning object.

1.2 Conflict

In order to have an active and engaging learning experience, the learner should be able to engage interactively with the learning object. Linear (or didactic) constructions limit interactivity but may be necessary for effective communication of knowledge. Simulations allow the user to engage with the concepts in their own time.

1.3 Resolution

Provide simple, but engaging interactions, that are spaced over the course of the RLO and whose inclusion matches with the pedagogical aims of the material.

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| 1 | No interactivity included |
| 2 | 0-20% of the RLO contains interactivity |
| 3 | 20-35% of the RLO contains interactivity |
| 4 | 35-50% of the RLO contains interactivity |
| 5 | >50% of the RLO contains interactivity |

2. Objective

2.1 Definition

The learning objective (goal) states what the learner should be able to successfully demonstrate or accomplish after working through and engaging with the RLO

2.2 Conflict

A small, self-contained learning object should be based on a small, self-contained learning objective. Learning objectives are often too large in scope, ill- or vaguely defined. Here, the RLO will be too large and unwieldy. Similarly, a poorly defined or broadly focused learning objective is often poorly aligned with the content

2.3 Resolution

Make sure the learning objective is tight and focused. Do not include the word “and” as this usually indicates more than one learning outcome. Refine a broad learning objective by narrowing it down iteratively. If necessary, and develop a small “family” of learning objects. Ensure that each section of the RLO is focused on the learning objective

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| 1 | No clear learning goal can be determined |
| 2 | A broad learning goal can be determined |
| 3 | A focused learning goal can be determined, but less than 33% of the content addresses this goal |
| 4 | A focused learning goal can be determined; between 33-66% of the content addresses this goal |
| 5 | A focused learning goal can be determined and over 66% of the content addresses this goal |

3. Integration

3.1 Definition

The extent to which the various media types (audio, videos, graphics, images etc) are successfully integrated into the RLO so that the whole is greater than the sum of the parts.

3.2 Conflict

For the learning object to be effective and engaging, the integration of the media elements should be both appropriate and seamless

3.3 Resolution

Form follows function. In the Bauhaus tradition recognise “truth in materials”. Keep it simple – use Occam’s razor (“Entities are not to be multiplied beyond necessity”). Find pleasing ways of (re)combining them. This is largely an aesthetic choice and requires practical insights from developers and designers, so work closely with them, prototyping, discussing ideas, drawing storyboards, describing scenarios.

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| <ol style="list-style-type: none">1 Contains only 1 media type (audio, image, video etc)2 Contains at least 2 media types3 Contains at least 3 media types, but these are presented to the learner separately4 The learner is presented with a combination of 3 or more media types for up to 66% of the RLO presentation time.5 The learner is presented with a combination of 3 or more media types for over 66% of the RLO presentation time. |
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4. Context

4.1 Definition

The degree of contextualisation of the materials or how specific to a discrete group of learners.

4.2 Conflict

For a learning object to be reusable it should not be applicable to the broadest group of learners possible, yet learning often needs to be contextualised to be effective

4.3 Resolution

Make the learning object as generic as possible and where it needs to be contextualised for different subjects then allow it to be customised.

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| <ol style="list-style-type: none">1 Highly contextual. This RLO only relevant to the discrete module it was designed for2 High level of context, but the RLO could be used by closely related courses3 Medium level of context, the RLO could be used widely within a specific (academic) discipline4 Minimal contextual references included, the RLO could be used across related (academic) disciplines.5 No contextual references made, the RLO could be used wherever this subject is included in a curriculum. |
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5. Media Standard

5.1 Definition

The quality and appropriateness of individual media elements

5.2 Conflict

High quality media elements in many different varieties are time-consuming and costly to create. But they are essential for the production of engaging multimedia

5.3 Resolution

Create the best quality materials within the available resources. Establish and share protocols to productively “batch” process (e.g. photographic images to vector). Build a shared library of components. Work within a culture of reusability rather than creating “one-off” solutions.

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| <ol style="list-style-type: none">1 No visual or audio elements included2 Media elements are of a standard below that of contemporaneous materials3 Media elements are of a standard comparable with contemporaneous materials4 Media elements are of a higher standard than many contemporaneous materials5 Media elements are of exceptional standard when compared with contemporaneous materials |
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6. Pre-requisites

6.1 Definition

The extent to which a learner is required to possess pre-requisite knowledge in order to successfully achieve the learning objective

6.2 Conflict

If learning objects are to be self-contained they should have no necessary dependencies on other learning resources. Yet knowledge is often organised in a hierarchical form that requires prior understanding of core concepts

6.3 Resolution

Separate the learning objects from the hierarchy. Make the hierarchy of knowledge explicit outside of the learning objects and present the RLO as single entities within this hierarchy.

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| <ol style="list-style-type: none">1 Learners require very specific, technical knowledge before undertaking this RLO2 Learners require a general subject grounding to A’level standard before undertaking this RLO3 Learners require a general subject grounding, to GCSE level standard before undertaking this RLO4 Learner require a general knowledge of the subject before undertaking this RLO5 Learners do not require any pre-requisite knowledge before undertaking this RLO |
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7. Support

7.1 Definition

The level of support provided to the learner by the content author within the learning object – eg help menus, glossaries navigational support, on screen advice etc

7.2 Conflict

Different learners require different levels of support to achieve successful learning outcomes

7.3 Resolution

Involve learners in determining levels of support required.

- 1 Help, instructions and support are not present
- 2 Help and instructions are the minimal and not always adequate
- 3 Help and instructions are adequate/effective
- 4 As 3, but additional support is available on request
- 5 Support/instruction is intuitive or adaptive to the needs of the learner

8. Feedback

8.1 Definition

The level of feedback provided to the learner whilst undertaking the interactive elements or assessments within the learning object

8.2 Conflict

It is difficult to predict what levels of feedback will be required at run-time

8.3 Resolution

Involve learners in determining levels of feedback required

- 1 No feedback is given
- 2 Minimal marking (eg “correct” or “incorrect” or 4/10 or “No, try again)
- 3 Explanations of marks given (eg correct answer is shown)
- 4 Explanations tailored to learner’s response (you stated...., however this is incorrect because....)
- 5 Feedback includes help and advice (eg your answer was wrong, if you would like to learn more this go to.....)

9. Self Direction

9.1 Definition

The level of self-direction afforded to the learner through open navigation, optional interactivity, optional sections etc.)

9.2 Conflict

Self-direction is desirable for learners to take control of their learning. Increased choice may result in over-complication and hence reduce the chance of attaining the learning objective

9.3 Resolution

Any choices offered to the learner should enhance the learning objective even though attainment of the learning objective may not be dependent on a particular choice.

- 1 The learner has no choice of task selection/navigation/completion
- 2 1-2 points at which learner has choices of task selection /navigation/ completion
- 3 2-5 points at which learner has choices of task selection /navigation/ completion
- 4 More than 5 points at which the learner has choices of task selection/ navigation/ completion, but still some directed elements
- 5 Every task and navigation point offers the learner choice of task selection/ navigation/ completion.

10. Navigation

10.1 Definition

The extent to which the learning activity forms part of the learning design

10.2 Conflict

Linear or directed navigation can be repetitive and tedious but more open non-linear constructs with multiple pathways can be confusing and disorienting

10.3 Resolution

Make activities meaningful. Mix linear and non-linear navigation or allow learner to choose. Provide a variety of media in linear constructs to keep attention and interest. Provide clear maps with “you are here” markers for multiple pathways.

- 1 No navigation
- 2 Mainly Linear (one forward option per page)
- 3 Mainly Branching (more than one option per page), but some linear
- 4 Mainly Branching, but some open
- 5 Mainly Open (any page can be reached from any other page)

11. Assessment

11.1 Definition

The extent to and ease of which the learner can perform an effective self-assessment

11.2 Conflict

Self-assessment is for the learner's benefit, so that they can gauge how well they have understood the material. Assessments are often written as an after-thought and may not be clearly defined or pitched at the right level.

11.3 Resolution

Define the assessment as clearly as you would a learning objective. The assessment should be pitched at the same level of difficulty as the other materials.

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| <ol style="list-style-type: none">1 No assessment included2 Minimal assessment of learning goal (eg 1-2 questions)3 Sufficient assessment learning goal (eg 3-5 questions)4 Comprehensive assessment of learning goal, mainly at one point in the RLO (eg more than 5 questions)5 Extensive assessment of learning goal throughout RLO. (eg more than 5 questions), but spread throughout the RLO. |
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12. Alignment

12.1 Definition

The extent to which the assessment elements measure attainment of the learning objective

12.2 Conflict

If the learner is to be confident that they have attained the learning objective, the self-assessment and the learning objective must be completely aligned.

12.3 Resolution

Ensure that the assessment is closely aligned with the learning objective. Refine both learning objective and assessment iteratively during the content creation process – they are two sides of the same coin.

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| <ol style="list-style-type: none">1 No assessment2 Less than 25% alignment*3 25-50%4 50-75%5 Greater than 75% alignment |
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** ie only 1 in 4 questions assesses attainment directly related to the learning goal, and/or only _ of the material pertinent to the learning goal's attainment can be assessed.*