

Quality of Online Learning Objects Rubric

Created by Provost’s Committee on Digital Excellence Evaluation Subcommittee - DRAFT

This is a quality rubric for learning objects (LO’s) and modules, it is not designed for use with full length videos or entire courses.

Components the **ideal** LO are included, that is, it lists what **designers should aspire to and what learning scientists know to be effective**. Many LO’s do not contain these components, we understand.

- I. **Structure**- Primarily mechanics, how the object is built and segmented
- II. **Pedagogy** – Greatest emphasis is on the inclusion of generative or constructive content
- III. **OPTIONAL: Assessment**

<i>I. Structure</i>	<i>0 (not present)</i>	<i>1 (present)</i>	<i>2 (Deemed High Quality)</i>	<i>NA</i>	<i>SCORE</i>
Learning Object Descriptions: Title Author Avg. Time to Complete Audience Key Words	All required items are not present	Some components are present	All items are present		
Learning Objectives:	Not present	Listed but constructs are not measurable (e.g., “They will understand x”)	learning objectives are explicit, measurable and attainable		
Well-segmented:	Not segmented, e.g., no conceptual chunking	Some efforts made for appropriate segmentation or chunking	Done with best segmenting and chunking practices: e.g., If video clip, then segment not longer than 7 to 20 minutes.		
User interaction with content: Quantity	No interactivity with content beyond navigation	Some interactive components are present, e.g. user controls pacing, content contains search function, etc.	More than one instance of interaction with content, e.g., games, multiple places for learner to be generative, etc.		
Accessibility: Individuals w/visual and hearing impairments are not at a disadvantage, Universal design http://www.udlcenter.org/aboutudl/udlguidelines	Not accessible for all users	Some enhanced accessibility features present	Highly accessible for all users (e.g., images tagged for blind, transcript of the module can be printed, etc.)		
Adaptive: Number of sequences of learning based on performance	No adaptivity; does not adapt to baseline test or ongoing performance by user	Some user performance analytics taken into account, e.g. a couple of questions are tied to previous performance	Multiple instances of highly adaptive content, many branches in content and/or questions based on ongoing performance throughout		

II. Pedagogy					
Interactivity-Quality: The multiple multimedia components are designed with best design principles based on research	Components are not well conceived	Many interactive components – but low level, e.g., click on a target, or only one strong interactive component	Majority of the interactivity supports tasks and follows best design practices (e.g., graphics and descriptive text should be in same window.)		
Generative: Highest form of interactivity - Encourages students to actively construct knowledge or outputs	Canned/ passive delivery; Students do not create answers <i>(Note: navigation is not the same as constructive choice)</i>	Students have some choices, some generation of knowledge is elicited: e.g., answer multiple-choice questions and get immediate feedback , sorting of objects	Module supports multiple instances of creative generation. There is Interactivity and Construction, similar to I and C in Chi (2009) ICAP hypothesis. E.g., students could answer open-ended questions. When constructing visually should build models as seen in Virtual Lab. http://www.vlab.co.in/		
Metacognition: Encourages metacognition and/or Bloom’s higher order thinking strategies	No higher- level strategies are included	Some higher-level mixed with lower level strategies, e.g., memorization tasks	Encourages constructs such as question generation, summarization, application, analysis, synthesis, and evaluation		
Interaction among students: <i>(if applicable)</i> Could include discussion boards or small group work	No interaction is needed or encouraged	A minimal amount of interaction is encouraged	Interaction with others is thoughtfully interwoven into the object? Evaluation of other’s work- Peer Review		
Diverse and real-world examples: Authenticity can encourage motivation, sense-making, and transfer	Does not include real- world examples	Some diverse examples and/or real world examples are present, but not highly relevant	Many relevant and diverse examples are included that anchor content well		
Feedback:	No feedback included	Limited feedback	Inclusion of evaluative feedback that is consistently more than a right/wrong distinction		
Did LO align with stated objectives?	No	Somewhat	Fully		
				Sum	

III Assessment if Present

<i>OPTIONAL</i>					
<p>If Assessment is Present:</p> <p>Refers to both formative (during act of learning) and summative (at end of module)</p>	No assessment	Only summative and low level: e.g., Multiple-choice or T/F questions	Both types present. Appropriate placement of formative items, and summative at end is aligned w/ learning goals and encourages generativity		
<p>Feedback for assessment only:</p> <p>Feedback should be tightly temporally linked to performance, also a distinction between evaluative (verbal) versus numerical feedback could be made</p>	No feedback is provided	Only one or two instances of feedback are provided	Immediate feedback is provided– e.g. on the next screen, or close to a peer review turn.		
Adaptive Test Items:	No adaptive test items	Some adaptive test items are included	Multiple adaptive test items appear based on prior performance		
<i>SUM</i>					

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GLOSSARY: Under Construction....

Learning Object

Generative

Constructive

Interactivity

Transfer

Metacognition

Adaptivity

Authenticity- A form of assessment in which students are asked to perform or answer real-world tasks and queries that demonstrate meaningful application of essential knowledge and skills.