

REUSABLE DESIGN REVIEW AND RATING FORM

This form is designed to aid in determining the reusability characteristics of digital educational resources. "No" answers indicate potential areas for reusability improvements. "?" = not sure.

ITEM	Y	N	?	Comments
Is the educational level identified and recorded?				
Is the primary audience identified and recorded?				
Is the technical format identified and recorded?				
Is the source code (or a version that can be edited) available for download?				
Is the copyright holder identified?				
Is contact information for the copyright holder given?				
Are terms and conditions of use given?				
May the resource be copied, modified and redistributed?				
Are there appropriate teacher and learner guides?				
Is technical and usage documentation available?				
Is the resource written using language that makes it accessible to as wide an audience as possible?				
Do the graphics make the resource accessible to as wide an audience as possible?				
Can the resource be used in a classroom setting?				
Can the resource be used in a self-paced online setting?				
Can the resource be used in a mentored online setting?				
Do the examples, stories and illustrations make the resource accessible to as wide an audience as possible?				
Does the resource consist of self-contained sections?				
Does each section address a specific, identified concept, idea technique or method?				
Can the resource run using standard versions of standard software on both Mac and Windows systems?				
Is it possible to change the fonts, color scheme and inessential graphical elements of the resource?				
Is the resource available in the form of an IMS or SCORM content package?				

OVERALL REUSABILITY CHARACTERISTICS RATING

In light of the above, and taking into consideration the perspectives of authors, teachers and students wishing to use part or all of this resource, its overall reusability characteristics are:

EXCELLENT

GOOD

FAIR


POOR

NOT RATED

WHY IS THIS IMPORTANT? HOW CAN I TELL?

ITEM	HINTS
<p>Is the educational level identified and recorded? Is the primary audience identified and recorded? Is the technical format identified and recorded?</p> <p>REASON: These elements help authors, instructors and students find resources they can use and avoid wasting time on ones they can't.</p>	<p>Educational level, primary audience, technical format and related information about a resource are sometime identified <i>within</i> the resource but are better handled through <i>metadata that is associated with the resource but separate from it</i>. If a resource comes from a digital library, look for metadata about the resource in search results. If the resource has many parts, metadata might be displayed in an introduction, notes, etc.</p>
<p>Is the source code (or a version that can be edited) available for download?</p> <p>REASON: Authors or instructors need this if they want to make changes to a resource. Source code is needed for editing and re-compiling software. Editable documents are needed for cutting, pasting, editing, changing fonts or colors.</p>	<p>Software applications should have source code available. Source code is written in languages like Java™, C++ or Lingo™ (for Director™) <i>and is human readable</i>. The source code for Web pages is available through the "view source" feature on most Web browsers. For Flash™ files, the .fla file (not just the .swf) file must be available.</p> <p>If the resource is a <i>document</i> (Word, PowerPoint, T_EX) make sure that it is not "protected" against editing / copying / pasting. In the case of PDF documents, the editable version is usually the original from which the PDF was made.</p>
<p>Is the copyright holder identified? Is contact information for the copyright holder given?</p> <p>REASON: Permission is required for reuse¹. The copyright holder must be identified so that permission can be obtained. Even if the permissions needed for reuse are granted in advance, a reuser might want to request special permission for some reason.</p>	<p>Note that the copyright holder may be different than the author. Look for an explicit copyright (often denoted by ©) statement with a copyright year.</p> <p>Look for an email, address or telephone number. If the copyright holder is an easily recognized institution or company (e.g. Stanford University or IBM), you may wish to consider the name alone as sufficient, although it is still better to have an explicit office to contact.</p>

¹ Note that Fair Use often does *not* apply to using or modifying existing resources to make new ones.

ITEM	HINTS
<p>Are terms and conditions of use given? May the resource be copied, modified and redistributed?</p> <p>REASON: Permission is required for reuse. It is better to grant in advance than to force a potential reuser to seek it from the copyright holder. These are the permissions that must be granted for full reuse. These are <i>not</i> required for linking to a resource.</p>	<p>The only real evidence is a license or statement granting these rights. Look for a usage statement or license, click-through license or link to a Creative Commons license:</p>  <p>When evaluating <i>which</i> permissions are granted, note that resources may still be copied, modified and redistributed even if attribution is required or if the copyright holder asks for notification that the resource is being used. Note also that resources “in the public domain” have no usage restrictions.</p> <p>Fair use: some uses may be permitted under “fair use” but that this does not justify a “yes” answer – permission must be explicitly given.</p>
<p>Are there appropriate teacher and learner guides? Is technical documentation available?</p> <p>REASON: Technical documentation is needed for authors and developers. Usage documentation is of great value to instructors and learners. It helps them determine whether the resource is right for them and helps them make more effective use of it.</p>	<p>Teaching and learning guides may appear as notations in the content, as separate sections, or as supplementary material referenced by links. The latter two methods are preferred. Including teaching and learning guides in the content tends to place a resource into a specific context and makes it harder to reuse it in others.</p> <p>Technical documentation may be included as a separate file or as set of help screens. When reviewing a resource that can potentially be modified for reuse, look for this documentation.</p>

ITEM	HINTS
<p>Is the resource written using language that makes it accessible to as wide an audience as possible?</p> <p>Do the examples, stories and illustrations make the resource accessible to as wide an audience as possible?</p> <p>Do the examples, stories and illustrations make the resource accessible to as wide an audience as possible?</p> <p>REASON: A resource has more value if it can be used by more people and in more contexts. Often reuse takes place in situations not envisioned by the original content creator. It is therefore best to use language, images and examples that place as few limitations as possible on background needed to make effective use of a resource. This must be done within the constraints imposed by the nature and character of the subject and the resource.</p>	<p>Within the context of the subject being discussed, look for language that is simple, straightforward, free of unnecessary jargon, and free from unnecessarily complex vocabulary. If technical or specialized terms are used, check to see if the resource provides links or explanations that might make it possible for someone less familiar with the terms to derive some learning benefit from the resource.</p> <p>Images and examples often require cultural knowledge for proper interpretation. Use your judgment to determine whether the images and examples make too many assumptions about the background of the learner that are not necessary for understanding.</p> <p>If possible and applicable, check Web Accessibility Guidelines (http://www.w3.org/WAI/Resources/#gl).</p> <p>Some jurisdictions require resources to be available in multiple languages. It is good to note such resources.</p>
<p>Can the resource be used in a classroom setting?</p> <p>Can the resource be used in a self-paced online setting?</p> <p>Can the resource be used in a mentored online setting?</p> <p>REASON: A resource has more value if it can be used by more people and in more contexts. These include classroom use, "blended learning," online self-study, and online study under the guidance of a mentor.</p>	<p>Many resources are originally designed for a specific setting and make assumptions about the presence (or lack of presence) of a teacher or mentor. If a resource requires a physical object or relies on a classroom experiment or demonstration, look for a "virtual equivalent" in the form of a simulation. If a resource is designed for online use and includes material that would normally be provided by an instructor, make sure that material is separated so that it can be replaced by something else in a classroom or blended learning environment.</p> <p>Separate teacher and user guides also make it easier for a resource to be used in multiple settings.</p>

ITEM	HINTS
<p>Does the resource consist of self-contained sections?</p> <p>Does each section address a specific, identified concept, idea technique or method?</p> <p>REASON: Instructors, students and authors often want to reuse only part of a resource. This is made easier by structuring resources into smaller, logical sections, each of which addresses a single (or small set of related) concepts, ideas, techniques, or methods or, more precisely, learning objectives.</p>	<p>"Self-contained" is affected by navigational structure and references.</p> <p>Navigational Structure: The best navigational structure is one in which the resource is divided into sections that can be independently reached through separate navigation screens or through navigation built into a containing frame. The worst approach for reusability is that in which the resource is a long "course" in which pages are linearly linked by "previous" and "next" buttons.</p> <p>References: When examining references look for resources such as texts, Web sites, examples, multimedia clips, etc. that might not be available either as part of the resource or through a publicly accessible link. Sometimes inaccessible references are part of the general context of the resource (for example, if the resource accompanies a specific text) but as such references severely limit reusability. It is best if all references for a section are contained within that section or, for authoring purposes, exist in a form that can be easily added to the section.</p> <p>Pedagogical Design: When looking at the design of a resource, keep in mind that many students and teachers will want to find resources that address a specific topic. Put yourself in the shoes of a teacher looking for materials that will be combined with other materials – online or not – to make up a larger unit. Also look at the resource from the perspective of a student looking for prerequisite material, an alternative treatment, or supplemental material on a topic they are studying on their own or as part of a class. Ask yourself if the sections of the resource have clear learning goals and whether they can be used independently to achieve those goals.</p>

ITEM	HINTS
<p>Can the resource run using standard versions of standard software on both Mac and Windows systems?</p> <p>REASON: Resources cannot be used if they won't run on most student and instructor systems. Minimizing platform and software dependencies maximizes reusability.</p>	<p>A reasonably high level of technical expertise is needed to test for this. For most reviewers, the best policy is to look for unusual technical requirements mentioned in the resource and perhaps to try the resource out in their own environment. The important things to flag are resources that require specialized plug-ins or applications that are not present on most people's computers, especially if the required software is not widely and freely available.</p> <p>In making judgments, "standard software" can be assumed to include:</p> <ul style="list-style-type: none">• A Web browser (Internet Explorer™, Safari™ or FireFox™)• Microsoft Word™, PowerPoint™ and Excel™• Adobe Acrobat Reader™ or Acrobat Plug-ins for reading PDF files• Macromedia Flash™, Director™, and associated plug-ins• A Media Player such as Windows Media Player or QuickTime™.• Java™ <p>Within certain disciplines, other software is standard – e.g., TeX or Computer Algebra Systems plug-ins within mathematics or computer science.</p> <p>Most Web resources can run using standard versions of standard software and can run on Macs and PCs. It is best to avoid "Active-X controls" and Visual Basic applications – these can generate security alerts on PCs and won't run on Macs. You have to be somewhat technically savvy in order to test for these if your own system is a Windows system and is not configured to alert for them.</p>

ITEM	HINTS
<p>Is it possible to change the fonts, color scheme and inessential graphical elements of the resource?</p> <p>REASON: Aggregating resources (or parts of resources) with different designs can produce a jarring visual effect that detracts from learning. A resource is more reusable if its fonts, colors and graphical elements can be changed so that it can be integrated with resources from other sources in the same learning environment.</p>	<p>HTML that uses style sheets can be manipulated as required, as can document formats such as Word or PowerPoint. Content expressed in XML that identifies elements within the content rather than format also gets a "yes." Web pages that don't use style sheets, Flash movies, and other content that is relatively fixed in its appearance gets a "no."</p> <p>Considerable technical expertise may be required to make a valid determination. In such cases, it may be wiser not to answer the question.</p>
<p>Is the resource available in the form of an IMS or SCORM content package?</p> <p>REASON: Content in this format can be ingested and used by most learning management and course management systems. Furthermore, SCORM content is by its very nature broken into self-contained sections and includes standardized metadata.</p>	<p>The general rule here is that if it is not obvious, the answer is probably "no." IMS and SCORM packages are .zip archives that include a file called <i>imsmanifest.xml</i>. They are generally identified as content packages or as SCORM Content Aggregations by the provider of the content.</p>