

KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

STANDARDS FOR ONLINE OPEN EDUCATIONAL RESOURCES (OERs) AND GUIDELINES FOR USER GENERATED CONTENT (UGC)

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Definition of Terms

Animation: movies with drawings, computer graphics, or photographs of static objects, including all techniques other than the continuous filming of live-action images.

Community of practice (COP): It is a group of people who share common interest for something that they all do and learn how to do it better through their regular interaction. A COP, in this case, will come about because members are motivated to share their digitally generated resources which they want to improve through their collective quality assurance process.

Course Content (CC): Course content refers to any information or subject matter that is related to a specific subject taught in Kenyan institutions of learning which is submitted to the KICD Education Cloud Platform (KICD EdCP) for online curation.

Course: An accredited unit of curriculum.

Digital Learning Content: Assembly and aggregation of discreet, digital (or electronic for display on a computing device) learning objects designed to meet intended learning outcomes. Content is a specific package of material for use in an overall curriculum.

Guidelines: Suggested or recommended approaches. Guidelines are speculative and assume certain conditions that may not apply in all situations.

Interactive: allowing a two-way flow of information between a computer and a computer-user; responding to a user's input.

Instructional Design: Systematic method of planning, developing, evaluating and managing instruction to ensure competent performance by the learner.

Metadata: Metadata is a set of words or phrases that summarizes the 'who, what, where, when and why' of a learning object (content), what their preference, learners should have

Multimedia: Multimedia is a computer application which represents information through audio, animation, text, drawings, still and moving images, and any other media where every type of information can be represented, stored, transmitted and processed digitally.

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Plug-in: A file containing data used to alter, enhance, or extend the operation of a parent application

program.

Revision Material: Materials that provide further practice and review the knowledge, skills and

attitudes acquired through activities, assignment and tests. Revision materials involve revision books

and workbooks.

Supplementary Content: Refers to content that addresses

1. Digital language and non-language readers

2.Readers on ECD activity areas

3. Digital Models

4. Contemporary and emerging issues

5. Digital Charts

Standards: Document descriptions that have received a stamp of approval or accreditation from

KICD. Standards tend to go through a relatively slow evolution, are conclusive and complete, and

are criteria specific. A standard is a "must".

Learning Content: Assembly and aggregation of discreet learning objects designed to meet

intended learning outcomes.

Learning resource: A learning asset or assets designed to address an intended learning outcome(s).

Learning Outcomes: They are statements of what learners are expected to know and do at the end

of an indicated grade or course.



List of Acronyms and Abbreviations

- 1. **GIF**-Graphic Interchange format
- 2. **JPEG** Joint Photographic Experts Group -a set of standards and file format for compression of digital color images. An image file compressed in this format.
- 3. **MPEG** Motion Picture Express Group.
- 4. **PNG** Portable Network Graphics
- 5. **TIFF** Tagged Image File Format

General Information

Open Educational Resources (OERs) are any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them [not for commercial purpose]. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation (UNESCO, 2002).

The standards are intended to serve as a guide for the development, curation and approval of Open Educational Resources. Accordingly, these standards will be subject to regular review and refinement.

Eligibility

Interested content developers should note that submissions will only be accepted from individuals, groups and publishers who are legally incorporated and registered in Kenya, and who can therefore provide, on request, valid certification of such incorporation/company registration and legal operation.

Content developers who wish to submit materials on behalf of firms that are not locally registered should make available a certified copy of the Agency Agreement or Representation Authority.

Submission areas

Eligible content developers may submit Open Educational Resources for any of the learning areas in basic education and tertiary levels. Content may also be submitted for these levels addressing contemporary and emerging issues such as HIV and AIDS, life skills education, school health water and sanitation.

The choice of education level, subject area and category of material(s) to submit is entirely at the discretion and judgment of the interested/submitting developer. A developer can submit in as many subjects and categories as possible. Each Submission will be curated solely in terms of its relevance and suitability for the requirements of the specific curriculum area and categorization as outlined in the necessary specific standard. Each digital content title should be uploaded in the grey part of Kenya Education Cloud (KEC).



Submission requirements

- Materials submitted for curation and approval should strictly be finished products.
- Any material that a content developer intends to be7 curated and considered for more than
 one level should be submitted in the distinct sets for each level, each set constituting a
 submission.
- Any material that bears information that purports it to have been 'Approved' by MoEST/ KICD prior to the current Submission, Curation and Approval process shall not be curated.
- Materials that carry a Foreword ostensibly from an official of MoEST/KICD should not be submitted.
- Electronic teaching aids which require operations must be accompanied by an operational manual. The parts and components of such submissions should be in good working condition. Testing to confirm workability of equipment will constitute the curation process.

Licensing

Content licensing details should be stated clearly including a description of when the license expires, where it may be used and by whom. The most common open license for content is **Creative Commons.** In most cases users of OERs have the right to modify the content (re-use or re-mix) to meet individual learner and educator needs, except where third party agreements restrict this.

Technical specifications

All materials presented for curation and approval must satisfy the requirements as outlined in the specific standards.

- The software used to package the content should be supported by popular operating system in the learning institutions
- They should be branded

Costs of curation and approval

The submission fees will be communicated during invitation.

Invitation to Submit Educational Open Educational Resources (OER's) for Curation and Approval

The Kenya Institute of Curriculum Development wishes to invite educational e-Content developers represented in Kenya to submit their Open Educational Resources. These Guidelines contain details on what to submit and the requirements for submission including assessment details where applicable.

Educational e-Content developers should therefore submit Open Educational Resources (OERs) to the Kenya Institute of Curriculum development (KICD) in accordance with the requirements established in the Guidelines as stipulated in this document.

The **Open Educational Resources Standards** may be downloaded from the KICD website portal www.kicd.ac.ke at no cost. Access and interact with the standards before submission.

All submissions should be received at the Institute through the portal on dates and times specified (as communicated). All prospective content developers should submit their materials online after filling the online course materials submission form. The learning resource will undergo various quality assurance processes:

- To assure quality
- For efficiency of processing
- To place the content in the right context/category

The learning resource must be peer reviewed through communities of practice, publishers, organization or peers before submission for curation as KICD.

The **OERs** will be used for learning purposes within Kenya and should therefore be appropriate for the following categories:

- a. ECDE Level,
- b. Primary Level
- c. Secondary Level
- d. Tertiary Level (Teacher Education and TVET)

Open Educational Resources are required for all subjects and activity areas across the different levels of education for both regular and special needs learners.



Each submission has to be accompanied by a non-refundable curation fee paid online as stated in the invitation for submission.

All enquiries should be directed to:

The Director/CEO

Kenya Institute of Curriculum Development

P O Box 30231 – 00100 NAIROBI GPO – Kenya

Tel (254 2) 3749900-9, 3748204, 3747994; (254) 20 – 2053419 Fax (254 2) 3639130

E-Mail: info@kicd.ac.ke

Online OER's Submission, Curation and Approval Schedule

NO	ACTIVITY
1.	Formal invitation for submission of online OERs materials
2.	Payment of submission fees
3.	Submission of online OERs materials
4.	Curation process
5.	Formal approval and recommendation
6.	Release of curation results
7.	Uploading of the online Orange Book
8.	Uploading the approved materials



General Standards

Online OERs will be curated on the following broad areas:

- Conformity to the curriculum
- Accuracy and currency of the content in the material
- Language use
- Promotion of positive values and attitudes
- Responsiveness to contemporary and emerging issues
- Multimedia elements
- Technical design
- User guide
- Cloud content attributes
- compliance with the Kenyan education policies
- creativity of packaging to enhance the information
- provision of assessment activities to deepen the understanding of concepts and develop required skills (where applicable)

Generally, whatever the category, the materials should

- ✓ feature Kenyan content and examples wherever relevant
- ✓ be sensitive to societal values
- ✓ represent the Kenyan cultural, ethnic and environmental diversity, illustrations and examples, wherever it is considered appropriate and relevant.

Specific Standards

A. Instructional Design and Pedagogy

The instructional design and pedagogical standards below represent design considerations for the learning resource to be motivating and effective at fostering and supporting learning.

Content

- Ongoing interaction between users and content is fostered hence making learning interesting, motivating and involving.
- ii. Learning resource activities require users to manipulate information and ideas to comprehend, apply, analyze, synthesize and evaluate new knowledge, and provide opportunity for practice and transfer of learning in a variety of ways.
- iii. A wide range of methods for completing assignments or progressing through the content is accommodated for the user.
- iv. Facts and ideas are applicable to the real world and are authentic for users.
- v. Information presented in the learning resource is accurate.
- vi. The learning resource clearly identifies the relevant learning outcomes
- vii. The learning resource organizes and sequences content in a way that is appropriate for the subject matter and age of the intended audience.
- viii. The learning resource is socially, culturally, and age appropriate for the intended audience in terms of gender, age, cultural diversity.
- ix. The learning resource should promote positive values and attitude.

Pedagogy

- i. A wide range of learning styles is supported such as visual, auditory, and kinesthetic.
- ii. The learning resource provides examples of activities, assignments and reflections.



- iii. Different modes (pictorial, verbal) for presentation of essential information are incorporated.
- iv. Appropriate questioning strategies are evident in the interactions set up in the learning resource.
- v. Users are given opportunities to apply knowledge to meaningful and authentic problems.
- vi. The learning resource indicates clear and accurate directions for all activities and/or assignments.

Language

- The learning resource uses appropriate language in terms of gender, age, level of education and cultural diversity.
- ii. The language used in the learning resource should be grammatically correct such as punctuation, spelling, typographical and sentence structure.
- iii. The terminologies used are accurate and consistent throughout the learning resource and abbreviations are defined in full.

B. Technical Design

- i. The software used is common and easily accessible to all users.
- ii. Formatted so that it is accessible to users from all locations at both low and high bandwidths.
- iii. The learning resource can be used on different operating systems.
- iv. The learning resource multimedia has been optimized for size and use with standard computer graphics and systems such as compressed files; MP3 files, JPEG or TIFF for photos, and GIF or PNG for computer graphics.
- v. Video, animation and sound file formats can be played on freely available and commonly used plug-ins or players.
- vi. A simple, consistent and accessible structure for the navigation of the materials is provided.

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- vii. The learning resource provides learner control of audio or video (i.e. learner can turn on/off audio and/or video files. The user can also start, stop, pause video clips and alternate tags or script of the audio is provided.
- viii. The resource should provide for controls –back, forward and play. Other features include; search, help, glossary, links and hyperlinks.

C. Layout (Visual Design)

- The learning resource explains each icon function (i.e. cursor over tag appears describing button), and graphics are relevant, consistently identified, labelled and described.
- ii. All clickable objects in the content are identified through the use of labels, borders, or instruction in text as appropriate.
- iii. Text material is provided in standard formats accessible to learners.
- iv. The resource uses identifiers in a consistent manner to signal steps in a process.
- v. Key terms are highlighted on screen and are in the glossary.
- vi. Format is uncluttered, includes white space, effective use of colour, and graphics where appropriate, and text colours are clearly legible over background colours.
- vii. Text is organized into readable paragraphs for presenting on display.
- viii. The resource provides learners the opportunity to proceed at their own pace and revisit sections as required (adaptive learning).
 - ix. The resource has a consistent tone, readability, look and feel.
 - x. An efficient and comfortable learning interface that provides a minimum of fatigue is employed (i.e. is visually appealing without being over stimulating).



D. Assessment

The following standards will only apply to online Open Educational Resources that have an assessment component;

- i. The learning resource specifies clear instructions for successful completion by the user.
- ii. The user assessment is linked to learning outcomes, associated content, and learning resource activities.
- iii. Assessment methods are constructed to measure learning on a variety of levels such as fact, concept, process, critical thinking, problem solving.
- iv. The learning resource incorporates a variety of methods of user assessment such as quizzes, matching activities, reflection, discussion questions and on-the-job activities.
- v. The learning resource provides opportunities for user practice and transfer.
- vi. Meaningful, useful and relevant feedback is provided to the user.

Guidelines for Online User Generated Content (UGC'S) General Information

User Generated content is the content generated from the interaction in a web. This could be a forum which allows the users to share their content, comments, ideas and links. Other examples could include wiki's, Edmodo, Edublogs that allow users to share content.

Many different types of websites contain user generated content. The Kenya Education Cloud will provide a platform through which content will be generated and allow for feedback from the users.

Rules for UGC on Kenya Education Cloud

When users post comments on content that is already on the platform, the user should

- 1. Create a user account
- 2. Use acceptable language (no –Swear, mother tongue, slang, vulgar)
- 3. Not share external links
- 4. Not post more than 200 words
- 5. Follow the Acceptable User Policy



Appendix 1: Submission Form & Meta Data

content in order to generate a tracking number.				
KRA PIN Registration:				
Declaration of Originality: By agreeing with this statement, I hereby declare that this is my				
original work and that any additional sources of information have been appropriately				
acknowledged.				
I agree I disagree				
Evidence of payment of submission fee:				
Evidence of official registration and incorporation in Kenya: (Scan and attach copy of				
registration document):				
Evidence of agency agreement or representation of Evidence of official registration and				
incorporation in Kenya (Scan and attach copy of agreement document):				
Contact (Phone, e-mail and physical address):				
Meta Data				
Subject Level				
Class				
Category of Learners (Regular or SNE)				
Category of Special Need (if Applicable)				
For Example, Visually Impaired – VI, Hearing Impaired – HI,				
Others (specify)				
Title				
Submission Code				

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Teacher's Guide (TG) Code (Where Applicable)				
Author(s)				
Author(s) Credentials				
PublisherPubli	isher's Code			
Country				
Community of Practice (Where Applicable)				
Language				
Brief Description:				
Format (e-Pub, Interactive Digital Content).				
Year of Production.				
Edition/Version Number.				
Rights (Where application)				
Size (Bytes) Code of Curator				
Price	Date			



Appendix 2: Licensing

Open License for content

A. Creative Commons https://creativecommons.org

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