

VLE Name	Typology	Platform description	Subjects	Languages	Content providers	Offline use?	Access	Pros	Cons
OER Commons (www.oercommons.org)	Basic content repository	<p>OER Commons offers a freely accessible library that contains curriculum-aligned and exploratory educational resources. Learners can use an advanced search function to filter content by:</p> <ul style="list-style-type: none"> a) Subject area b) Grade level c) Curriculum (where applicable) d) Language e) Material format <p>During the COVID-19 pandemic, OER Commons has developed content hubs for:</p> <ul style="list-style-type: none"> 1) K-12 Remote Learning 2) Common Core 3) Washington OER 4) Open Textbooks (Higher Education) 5) UNESCO ICT Competency Framework for Teachers 	<p>OER Commons provides content for all grades in:</p> <p>Languages Arts STEM Social Studies Humanities</p>	<p>OER Commons hosts content in a range of languages including:</p> <ul style="list-style-type: none"> 1) Arabic 2) English 3) Farsi 4) French 5) German 7) Indonesian 8) Italian 9) Portuguese 10) Spanish 11) Turkish 12) Urdu <p>OER Commons hosts a more limited range of content in:</p> <ul style="list-style-type: none"> 1) Amharic 2) Hausa 3) Hindi 4) Kinyarwanda 5) Lingala 6) Somali 7) Tajik 8) Yoruba 	<p>Content providers include:</p> <ul style="list-style-type: none"> 1) African Storybook 2) African Virtual University 3) AtrioEDU 4) Carnegie Mellon University 5) CK-12 6) Code.org 7) CUNY Academic Works 8) EngageNY 9) Khan Academy 10) Michigan Open Book Project 11) MIT 12) OER Africa 13) OpenStax 14) OpenSUNY Textbooks 	<p>Users can download content for use in low- or no-connectivity environments.</p>	Primarily creative commons	<ul style="list-style-type: none"> 1) Wide variety of curriculum-aligned and exploratory materials from reputable providers in multiple formats 2) Easy to use the search function to find materials relevant to your needs 3) A readily available and low-cost solution that learners can use without the need for high bandwidth or advanced hardware 4) Education providers do not need digitally literate teachers with training in distance learning pedagogies 	<ul style="list-style-type: none"> 1) A scarce selection of content that relates to the curricula, language and contexts of learners in low- and middle-income countries 2) Highly dependent on the student's capacity to self-regulate and self-motivate 3) Increased burden on caregivers to offer guidance on the selection of content and support with learning exercises 4) Few opportunities to track student attendance, engagement and achievement
Rumie (www.learncloud.rumie.org)	Basic content repository	<p>Rumie offers free online learning content that a community of volunteers has gathered and uploaded to their Learncloud. Users can use an advanced search function to filter content by:</p> <ul style="list-style-type: none"> a) Subject b) Sub-topic c) Age d) Language e) Rumie Recommended 	<p>Rumie provides content for all grades in the following subjects:</p> <ul style="list-style-type: none"> 1) Languages 2) Arts 3) STEM 4) Social Studies 5) Humanities 6) Life Skills 	<p>Rumie hosts content in the following languages:</p> <ul style="list-style-type: none"> 1) Algerian 2) Anishnaabem 3) Arabic 4) Cree 5) English 6) Farsi 7) French 8) German 9) Hindi 10) Inuktitut 11) Italian 12) Khmer 13) Maasai 14) Mandarin 15) Michif 16) Mohawk 17) Nepali 18) Oj-Cree 19) Polish 20) Portuguese 21) Romanian 22) Russian 23) Spanish 24) Swahili 25) Turkish 	<p>Rumie offers content from:</p> <ul style="list-style-type: none"> 1) Ubongo Kids 2) African Storybooks 3) EduApps4Syria 4) NMSA 5) Sesame Street 	<p>Learncloud resources can be downloaded for use on low-cost, offline-friendly devices.</p>	Free access	<ul style="list-style-type: none"> 1) Tried and tested with learners in low-resource, low-connectivity settings (e.g. Afghanistan, Syria) 2) High-quality and engaging exploratory content from reputable providers (e.g. Ubongo and Sesame Street) 3) A readily available, low-cost and tech-agnostic solution that does not require high bandwidth 4) Education providers do not need digitally literate teachers with training in distance learning pedagogies 	<ul style="list-style-type: none"> 1) A very limited range of curriculum-aligned content 2) Difficult to browse and identify resources from specific providers without prior knowledge of the location of their materials 3) Highly dependent on the student's capacity to self-regulate and self-motivate 4) Increased burden on caregivers to offer guidance on the selection of content and support with learning exercises 5) Few opportunities to track student attendance, engagement and achievement
CK-12 (https://www.ck12.org/student/)	Scaffolded content repository	<p>Education providers can use CK-12's digital textbooks to provide students with a structured learning pathway. Teachers can categorise learning content into chapters and concepts that host audio materials, videos, simulations, interactive activities and progress trackers.</p> <p>Educators have the option of creating their own textbooks or customising CK-12's existing materials. CK-12 equips instructors with a number of editing options that range from revising the wording of sentences to restructuring the order of content. Teachers also have the flexibility to incorporate their own resources and exercises into textbooks.</p>	<p>CK-12 provides a large repository of content for pre-primary, primary and secondary school students in the following subject areas:</p> <ul style="list-style-type: none"> 1) STEM <p>CK-12 offers more limited coverage in the following topics:</p> <ul style="list-style-type: none"> 1) Languages 2) Arts 3) STEM 4) Social Studies 4) Humanities <p>Education providers have the option of combining their own content with CK-12's materials to create interactive textbooks in any subject.</p>	<p>Most of CK-12's content comes in the following languages:</p> <ul style="list-style-type: none"> 1) English 2) Spanish <p>CK-12 offers a very limited range of content in:</p> <ul style="list-style-type: none"> 1) Korean 2) German 3) Chinese 4) Greek 5) Polish 	<p>Khan Academy offers content that aligns with education standards in the following countries:</p> <ul style="list-style-type: none"> 1) United States 2) India 	<p>Users can download CK-12 Flexbooks for offline use.</p>	Primarily creative commons	<ul style="list-style-type: none"> 1) CK-12 offers readily available, low-cost digital textbooks that can host written content, audio materials, videos, simulations, interactive activities and progress trackers 2) Provides students with a structured learning pathway as well as clear directions on how to pace their studies 3) Users can download and distribute CK-12's interactive digital textbooks (or Flexbooks) offline 4) Curriculum developers have the capacity to use and edit existing CK-12 materials 5) Supports a flexible response to COVID-19, allowing schools to use CK-12's existing content in the short-term before tailoring these resources in the medium- to long-term 	<ul style="list-style-type: none"> 1) A lack of content that relates to the curriculum, languages and context of learners in LMICs 2) CK-12's existing resources cover a very narrow range of subjects 3) Increased burden on caregivers to guide children to select appropriate textbooks, especially in areas where education providers offer limited advice 4) The platform cannot host direct teacher-student communication channels (e.g. discussion boards, live chat)
Khan Academy (www.khanacademy.org)	Scaffolded content repository (with possibility for curriculum alignment)	<p>Khan Academy curates instructional videos and practice exercises into structured course units. This scaffolded learning pathway identifies and adapts to student strengths and weaknesses.</p> <p>Students receive "master points" for completing different activities. Users can track their points total to monitor their progress on a personalised dashboard.</p>	<p>Khan Academy provides structured content for all grades in:</p> <p>Languages Arts STEM Social Studies Humanities</p> <p>Khan Academy offers a subset of content in the following languages:</p> <ul style="list-style-type: none"> 1) Arabic (limited) 2) Burmese 3) Dari (limited) 4) Farsi (limited) 5) Hindi 6) Indonesian 7) Kiwaha 8) Urdu (limited) 	<p>Khan Academy offers content in a range of languages including:</p> <ul style="list-style-type: none"> 1) Armenian 2) Bangla 3) English 4) French 5) German 7) Portuguese 8) Spanish 9) Turkish 10) Simplified Chinese 	<p>Khan Academy offers content that aligns with education standards in the following countries:</p> <ul style="list-style-type: none"> 1) United States 2) India 3) Mexico 4) Tanzania (Maths) 5) France 	<p>Khan Academy recommends downloading their videos and exercises on the Kollibri application.</p>	Primarily creative commons	<ul style="list-style-type: none"> 1) A readily available, low-cost solution that provides students with a structured learning pathway 2) Learners of any age can access a range of tried-and-tested materials that reflect general principles of effective pedagogy 3) Clear in-class directions can support students with self-regulation and pacing their learning 4) Education providers do not need digitally literate teachers with training in distance learning pedagogies 5) Personalised feedback and learning points system allows students to identify strengths and areas for improvement 	<ul style="list-style-type: none"> 1) A dearth of content that directly relates to the curricula and context of learners in LMICs 2) Demands relatively advanced hardware and reasonably high bandwidth to access educational videos 3) The heavy use of videos can amplify the challenge of understanding content in an unfamiliar language or dialect 4) No offline functionality (although students can access content on Kollibri) 5) Increased burden on caregivers to offer guidance on the selection of classes, especially in areas where education providers offer limited advice

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Kolibri - Learning Equality (www.learningequality.org/kolibri)	Hybrid platform	<p>Kolibri offers an open repository of curricular-aligned content and exploratory learning materials that users can access in low-resource settings (e.g. rural schools, refugee camps, orphanages, prison systems). In particular, the platform hosts subject-specific videos, reading materials, simulations, games, lesson plans and pedagogical guides.</p> <p>The platform has two core software components:</p> <p>1) Kolibri Studio curriculum tool: education providers can use the tool to curate content into "channels" that align with local education standards. Curriculum specialists can design channels using their own materials or publicly available resources.</p> <p>2) Kolibri application: school administrators can use the application to create and enrol students in virtual classes. In a virtual classroom, instructors can develop lessons with learning resources, quizzes and assignments. Administrators can incorporate material from Kolibri's open repository, import content from a national curriculum channel or upload their own resources. The application provides teachers with a progress tracker to manage student performance.</p> <p>Learners can use the application to access educational content. Even if a student is not enrolled in a class, they can still access materials on Kolibri's open repository.</p>	<p>Kolibri provides structured content for all grades in:</p> <p>Languages</p> <p>Arts</p> <p>STEM</p> <p>Social Studies</p> <p>Humanities</p> <p>Life skills</p> <p>Education planners can develop content channels that host their own resources as well as publicly available materials. In doing so, policymakers can feasibly use Kolibri to create a wide range of curriculum-aligned and exploratory education programmes.</p>	<p>Kolibri offers publicly available content in a range of languages including:</p> <p>1) Arabic 2) Bengali 3) Burmese 4) Chewa 5) English 6) Farsi 7) French 8) Hindi 9) Portuguese 10) Spanish 11) Swahili 12) Urdu 13) Yoruba</p>	<p>Content providers include:</p> <p>1) African Storybook 2) CK-12 3) EngageNY 4) Espresso English 5) Global Digital Library 6) HP Life Courses 7) Khan Academy 8) MIT 9) OpenStax 10) Osmosis 11) PHET Simulations 11) Pratham Open School 12) Pratham Books</p> <p>The governments in DRC and Uganda have used Kolibri to host their own curricular materials.</p>	<p>Users can access resources offline once a device has downloaded Kolibri installers and content. This device can share new materials and updates with other handsets over offline local networks. Users can export content from Kolibri to a portable USB drive and then import resources to other devices.</p>	<p>Freemium access</p>	<ol style="list-style-type: none"> 1) A readily available, low-cost solution that has been tried and tested in LMICs (e.g. DRC, Tanzania, Uganda) 2) A wide range of high-quality curriculum-aligned materials from other providers (e.g. Khan Academy, CK-12) 3) Once one device has downloaded content, this handset can share materials with students in low- or no-connectivity areas via local offline networks and USB drives 4) Students can access learning materials without enrolling in a specific class 5) The platform can support classes and content in a number of different languages 6) Administrators can create classes with their own resources or rely on the Kolibri open repository if they have no digitised content 7) Education providers do not need digitally literate teachers with training in distance learning pedagogies 8) Ministries can use the Kolibri Studio tool to develop channels with curriculum-aligned content for users in their country 9) Supports a flexible response to COVID-19, allowing schools to use publicly available content in the short-term and integrate curriculum-aligned content in the medium- to long-term 	<ol style="list-style-type: none"> 1) A scarcity of curriculum-aligned content for LMICs if administrators have no digitised resources 2) Publicly available content covers a limited range of languages 3) Demands a high level of planning to curate content, design exercises and organise lesson schedule 4) The platform cannot host direct teacher-student communication channels (e.g. discussion boards, live chat) 5) Increased burden on caregivers to guide children to select appropriate content where education providers have not created curriculum-aligned channels
Moodle (www.moodle.org)	Asynchronous learning platform	<p>Teachers can use Moodle to create course pages with educational resources, learning exercises, class assignments, discussion boards and mechanisms to deliver personal feedback. Students can either enrol manually or be enrolled by their instructor. Educators can upload pictures, PDF documents, spreadsheets, audio content and video files.</p> <p>Moodle supports a number of plug-ins that can expand the site's functions.</p>	<p>Education providers can use Moodle to teach any subject.</p>	<p>Moodle can host classes and content in a range of languages including:</p> <p>1) Amharic 2) Arabic 3) Bengali 4) Burmese 5) Dan 6) Farsi 7) French 8) Hausa 9) Igbo 10) Indonesian 11) Italian 12) Kinyarwanda 13) Kswahili 14) Kyrgyz 15) Portuguese 16) Somali 17) Spanish 18) Turkish 19) Urdu 20) Yoruba</p>	N/A	<p>Users can access a selection course activities once they have downloaded the Moodle application. Learners can take quizzes, conduct surveys, post on discussion boards and complete assignments.</p>	<p>Free to access, adapt, extend or modify for commercial and non-commercial projects</p>	<ol style="list-style-type: none"> 1) Less requirements for high bandwidth and advanced affordances than synchronous platforms 2) Teachers can develop, adapt and update curriculum-aligned content to meet the changing needs of individual students 3) Wide range of available plug-ins to support teachers with structuring materials, designing activities, assessing work and providing feedback 4) Reasonable teacher presence can enable students to better pace their learning and provide a greater sense of educational continuity 5) Students can access downloaded quizzes, discussion boards and assignments offline 6) Administrators can easily track student attendance, engagement and performance 7) The platform can support classes and content in over 100 different languages 	<ol style="list-style-type: none"> 1) Dependent on the availability of digitally literate teachers with prior training in distance learning pedagogies 2) The need to build course pages can lead to differences in the quality of resources, activities and class structure 3) Demands a high level of planning to curate content, design exercises and organise lesson schedules 4) Class codes create a barrier to accessing online content, offering disproportionate benefits to already advantaged students at schools with better resources 5) Limited offline functionality (e.g. users cannot share content with other students via local networks)
Google Classrooms (www.classroom.google.com)	Synchronous learning platform	<p>Google Classrooms facilitates online interactions between teachers and students. Instructors can create classes, post announcements, distribute assignments and give real-time feedback. Students need an invite or code to access the virtual classroom.</p> <p>The platform integrates with other Google tools such as Docs, Sheets and Slides. Teachers can provide materials using their class Drive.</p> <p>Parents can opt to receive an email summary on their child's progress that includes information on missing work, upcoming assignments and class activity.</p>	<p>Education providers can use Google Classrooms to teach any subject.</p>	<p>Google Classroom can host classes and content in a range of languages including:</p> <p>1) Amharic 2) Arabic 3) Bengali 4) Burmese 5) Chinese 6) Chichewa 7) French 8) German 9) Hausa 10) Indonesian 11) Italian 12) Kinyarwanda 13) Kswahili 14) Krio 15) Kurdish 16) Lugala 17) Luganda 18) Nigerian pidgin 19) Portuguese 20) Somali 21) Spanish 22) Turkish 23) Urdu 24) Yoruba</p>	N/A	<p>Online</p>	<p>Free</p>	<ol style="list-style-type: none"> 1) The integration of multiple Google applications provides students with a one-stop-shop platform for all of their learning needs 2) Many teachers and students may already have a basic understanding of how Google functions 3) Teachers can structure courses to meet national education standards and to suit the individual needs of learners 4) High teacher presence can support student motivation and provide a greater sense of educational continuity 5) The option to automatically send parents email updates on their children's progress can encourage caregivers to support home-based learning 6) Administrators can easily track student attendance, engagement and performance 7) The platform can support classes and content in over 140 different languages 	<ol style="list-style-type: none"> 1) Requires high bandwidth, high affordances and the payment of potentially high associated costs 2) Class codes create a barrier to accessing online content, offering disproportionate benefits to already advantaged students at schools with better resources 3) Dependent on the availability of digitally literate teachers with prior training in distance learning pedagogies 4) Demands a high level of planning to curate content, develop activities and organise lesson schedules
Edmodo (www.edmodo.org)	Synchronous learning platform	<p>Edmodo allows teachers to provide students a synchronous online learning experience by embedding live-video streams from YouTube, Google Hangouts, Zoom or Skype. Instructors have the option of uploading pre-recorded video lessons, classroom discussions, quizzes to monitor progress and assignments to capture student learning.</p> <p>Students need a class code (or password) to join lessons.</p>	<p>Education providers can use Edmodo to teach any subject.</p>	<p>Edmodo can host classes and content in the following languages:</p> <p>1) Chinese 2) English 3) Hungarian 4) Italian 5) Japanese 6) Spanish</p>	N/A	<p>Online</p>	<p>Freemium access</p>	<ol style="list-style-type: none"> 1) Educators can tailor content to the curriculum, learning objectives and contents of students in low- and middle-income countries 2) Opportunity to offer adaptive learning pathways and personalised feedback to pupils 3) High teacher presence can support student motivation and provide a greater sense of educational continuity 4) Administrators can easily track student attendance, engagement and performance 	<ol style="list-style-type: none"> 1) Requires high bandwidth, high affordances and the payment of potentially high associated costs 2) Class codes create a barrier to accessing online content, offering disproportionate benefits to already advantaged students at schools with better resources 3) Dependent on the availability of digitally literate teachers with prior training in distance learning pedagogies 4) Demands a high level of planning to curate content, develop activities and organise lesson schedules 5) The platform can host classes and content in a narrow range of languages 6) Higher cost than competitors