Empowering Course Design with Open Educational Resources (OER) in Learning Management Systems (LMS)

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Background & Purpose

Open Educational Resources (OER) are freely accessible, openly licensed educational materials that enhance teaching and learning. Learning Management Systems (LMS) like Moodle, Canvas, and D2L provide structured platforms for delivering digital learning experiences.

Integrating OER into LMS environments transforms traditional course design by enabling customization, accessibility, and interactivity. Pressbooks, an open-source publishing tool, streamlines this process by allowing educators to export, remix, and embed OER directly into LMS courses.

This poster explores how Pressbooks facilitates effective OER integration, empowering educators to design engaging, inclusive, and modular courses that support diverse student needs.

Tools & Platforms

Pressbooks · Common Cartridge · LMS Platforms · H5P

1. **Pressbooks** An open-source tool for creating and exporting OER in formats like webbooks and Common Cartridge for easy LMS integration.
2. **Common Cartridge** A packaging format (.imscc) that allows OER chapters from Pressbooks to be embedded directly into LMS modules.
3. **LMS Platforms** Learning Management Systems like Canvas, Moodle, and D2L serve as digital hubs for course delivery.
4. **H5P (Interactive Content)** H5P is an open-source tool for creating interactive learning content such as quizzes, drag-and-drop exercises.

Integration Workflow

STEP 1

Locate & Export from Pressbooks

- Search the Pressbooks directory to find suitable OER.
- Check if the **Common Cartridge (Web Links)** export is available.
- If missing, contact the publisher to enable it, then download the .imscc file.

STEP 2

Import Content into LMS

- Log in to your LMS (Canvas, Moodle, or D2L) course.
- Use "Import or Restore" to upload the .imscc file.
- Select relevant chapters to import.

STEP 3

Design & Customize Course Modules

- Organize chapters into LMS modules with aligned learning outcomes.
- Add complementary elements like discussions, quizzes, assignments, etc.
- Refine modules: rename, adjust visibility, and add guidance.

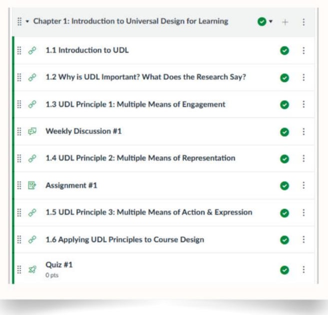
STEP 4

Integrate H5P Interactivity

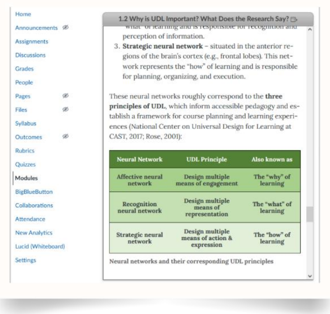
- Download relevant H5P activities from the Pressbooks webbook.
- Upload to Moodle/D2L or convert for Canvas using Lumi (SCORM).
- Embed for interactive learning and optional grading.

Outcomes & Benefits

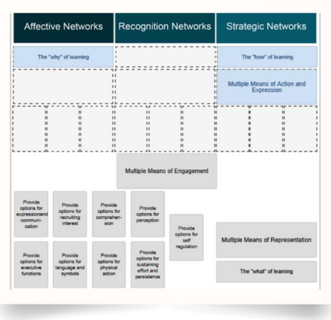
1 Flexible Design
Courses are built using modular OER elements tailored to learning outcomes.



2 Accessible Content
Open, responsive formats ensure usability across devices and learning needs.



3 Interactive Learning
H5P enhances engagement with dynamic, student-centred activities.



4 Empowered Educators
Educators can easily customize, remix, and deploy content with minimal technical barriers.

Practical Takeaways

- ✓ *Select Targeted OER*: Choose content aligned with your course outcomes.
- ✓ *Use Common Cartridge Web Links*: Export from Pressbooks for seamless LMS integration.
- ✓ *Design Around Content*: Add discussions, assessments, and multimedia to build complete modules.
- ✓ *Enhance with H5P*: Use interactive elements to deepen engagement and assess learning.

Acknowledgement

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We acknowledge that the land on which we gather in Treaty Six Territory is the traditional gathering place for many Indigenous people.

We honour and respect the history, languages, ceremonies and culture of the First Nations, Métis and Inuit who call this territory home.

Resources

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