

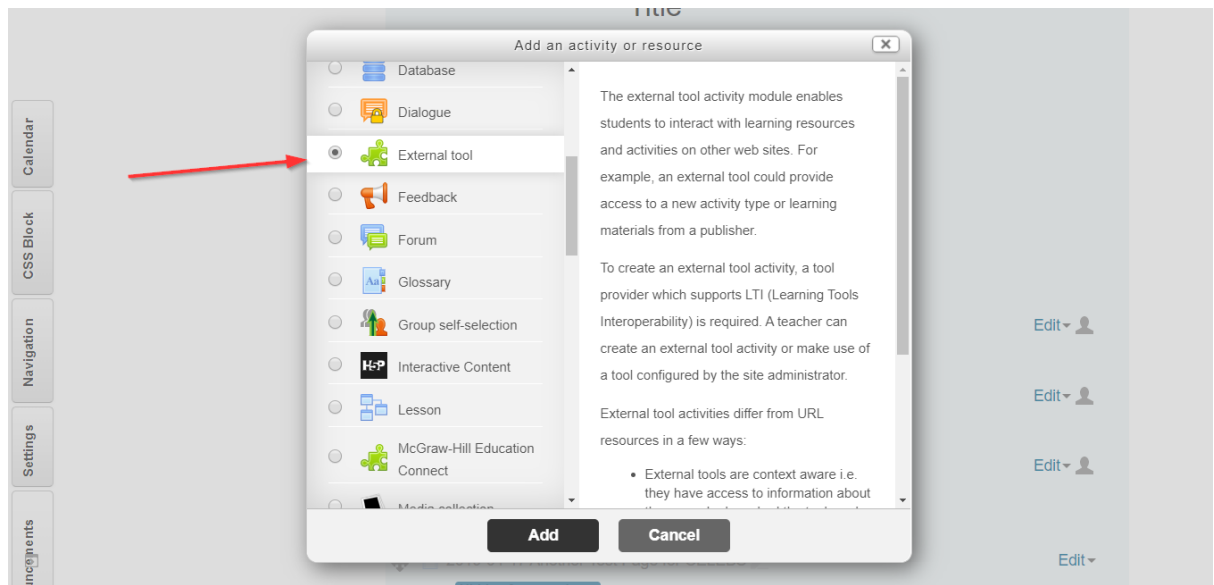
Knowledge Maps User Guide

Ver. 20190923

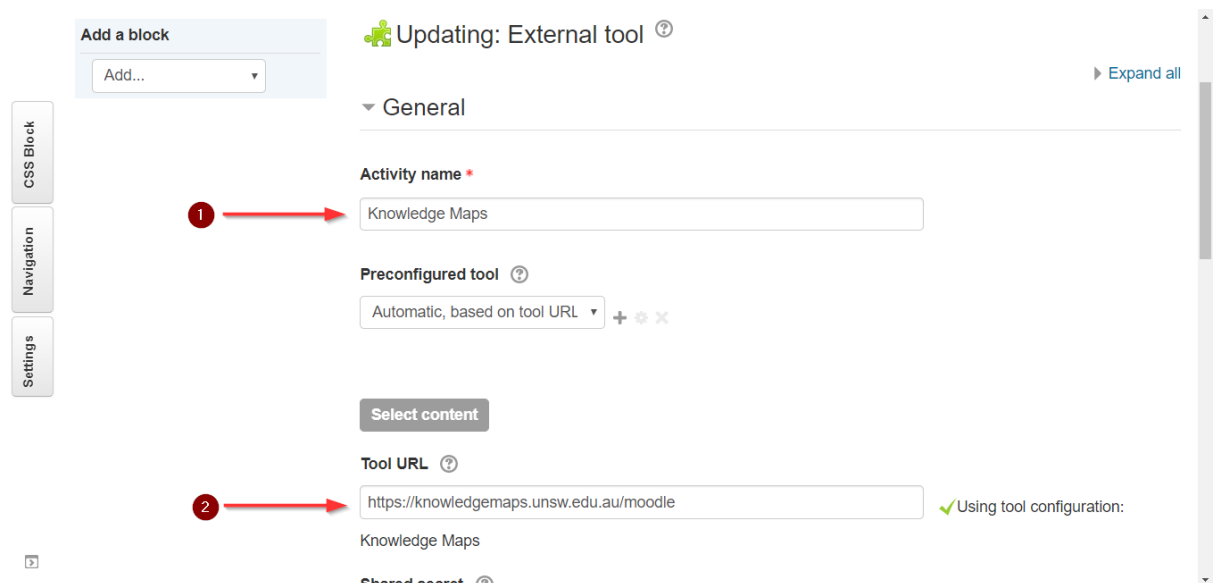
Knowledge Maps can be used to create, edit and share maps, as well as to provide automated assessment and feedback.

Connecting from UNSW Moodle

1. Select “External tool” in the “Add an activity or resource” popup window.



2. Enter in the activity name (marker #1) and set the **Tool URL** to <https://knowledgemaps.unsw.edu.au/moodle> (marker #2).



- After clicking the activity link in Moodle, users will be redirected to the Knowledge Maps server. Users can select an activity from a list to which the current user has access, then click the “Connect” button to connect the selected Knowledge Map activity to Moodle.

Knowledge Maps	
Activity Select	Submissions
Connect	First select or create a scaffold Map, then click Connect Then choose first, highest, or latest Grade Then choose whether to allow multiple Attempts
Moodle Activity: KnowledgeMaps Test in Meng Meng sandpit	
Activity	Description
<input type="text"/>	<input type="text"/>
z3314119	Folder
Map 1	Osteoarthritis

- When linking the activity, teachers can specify whether to return students’ first, highest or latest score for that activity to the Moodle grade book. Teachers can also define whether multiple submissions are allowed.

Create the Link

Moodle Activity: Meng Meng sandpit

Activity: Map 1

Return Grade: Highest

Multiple Submit: Allow

Add Cancel

How to use Knowledge Maps

Note: The best way to learn how to use Knowledge Maps is by the “Tour” button, which can guide you all the components of the software.



For Teachers

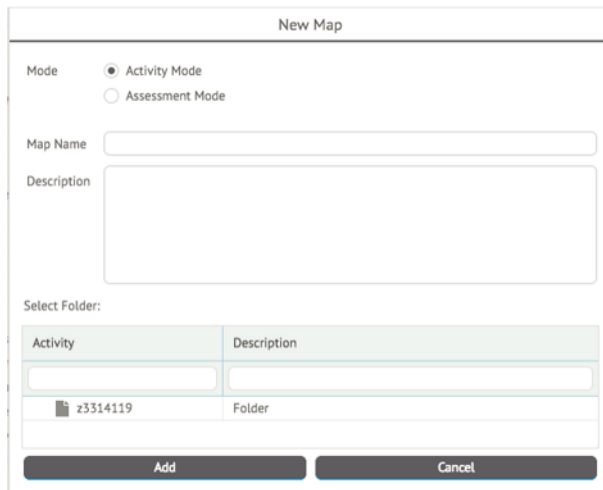
Activities

Once linked from Moodle, all teachers will automatically have a folder created in Knowledge Maps named with their zID, which contains all the activities that the teacher owns or can access. Teachers can create subfolders to arrange activities.

Add Activity

Click "Add Activity" Button to add a new activity. Please complete the map name and description in the pop-up window, then click the "Add" button.

Teachers can create mapping tasks for students either in "Activity Mode" or "Assessment Mode".



The "New Map" form includes a title bar, mode selection (Activity Mode selected), input fields for Map Name and Description, a "Select Folder" section with a table, and "Add" and "Cancel" buttons.

Activity	Description
z3314119	Folder

Activity Mode

Activity Mode provides flexibility for students to freely create and delete nodes and links in the map. There will be an Expert Map and a Scaffold Map. To achieve a 100% score, students will need to complete the Scaffold Map to match the content of the Expert Map.

Activity Settings

Teachers can edit the activity settings by clicking the "Activity Settings" button under the Map.



A row of buttons: Export, Import, Copy to Scaffold, Activity Settings, and Save.

Creating and editing an Expert (Teacher's) Map

1. Double click to create a new node
2. Click on node A, left click to draw a link from node A to node B.
3. Click on node A, then drag to adjust the node's location.
4. Click "Save" button to save the map to the database.

Click the Expert Map tab or Scaffold Map tab to switch to different view.



Activity Mode

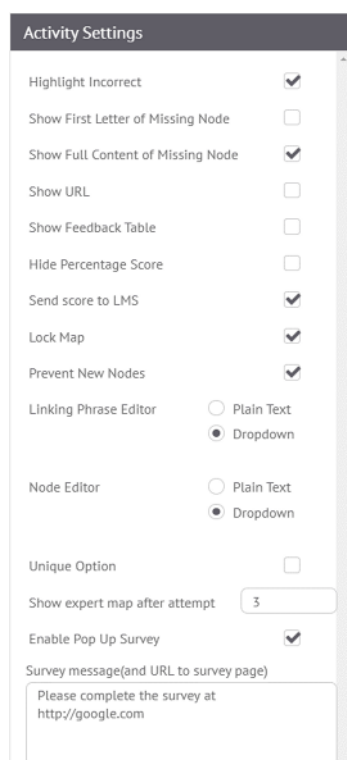
Expert Map Scaffold Map

In order to create the Scaffold Map from the Expert Map, teachers must first complete their Expert Map, then click the "Copy to Scaffold" button. Teachers can delete some of the nodes or linking phrases from the Scaffold Map. The more nodes and linking phrases that are deleted, the more difficult the activity will

become for students. The Scaffold Map is what students will see – depending on settings set up by teachers, students can complete the map, either by:

- selecting from dropdown lists (generated from all the nodes and linking phrases in the Expert Map); or
- entering free text.

It is recommended that dropdown lists be used to enable cueing for novice learners in a discipline, whereas free text may be appropriate for more advanced learners.



The screenshot shows the 'Activity Settings' panel for a Scaffold Map activity. It contains the following settings:

- Highlight Incorrect:** ☒
- Show First Letter of Missing Node:** ☐
- Show Full Content of Missing Node:** ☒
- Show URL:** ☐
- Show Feedback Table:** ☐
- Hide Percentage Score:** ☐
- Send score to LMS:** ☒
- Lock Map:** ☒
- Prevent New Nodes:** ☒
- Linking Phrase Editor:** ☐ Plain Text, ☒ Dropdown
- Node Editor:** ☐ Plain Text, ☒ Dropdown
- Unique Option:** ☐
- Show expert map after attempt:** 3
- Enable Pop Up Survey:** ☒
- Survey message(and URL to survey page):** Please complete the survey at <http://google.com>

Setting descriptions

Highlight Incorrect: turn the highlight on or off for incorrect node in feedback view (default checked)

Show First Letter of Missing Node: show first letter of missing node in feedback view (default checked)

Show Full Context of Missing Node: show full context of missing node in feedback view (default unchecked)

Show URL: show URL link defined in the node in Expert Map (default checked)

Show Feedback Table: show the feedback table under the feedback view (default checked)

Hide Percentage Score: hide the percentage score displayed in feedback view (default unchecked)

Send score to Moodle: send the percentage score back to Moodle (default checked)

Lock Map: lock the map so that student cannot move or delete the nodes and links in the Scaffold Map (default unchecked)

Prevent New Nodes: prevent student from creating new nodes (default unchecked)

Linking Phrase Editor: plain text or dropdown editor for linking phrases (default dropdown)

Node Editor: plain text or dropdown editor for nodes (default dropdown)

Unique Option: are the options unique across all nodes and linking phrases to be completed (default unchecked)

Show expert map after attempt: Show the expert map in feedback view after a defined number of attempts (default 3 attempts)

Enable Popup Survey: Show popup page with the content defined in the text area below, the first time each student submits their map (default unchecked)

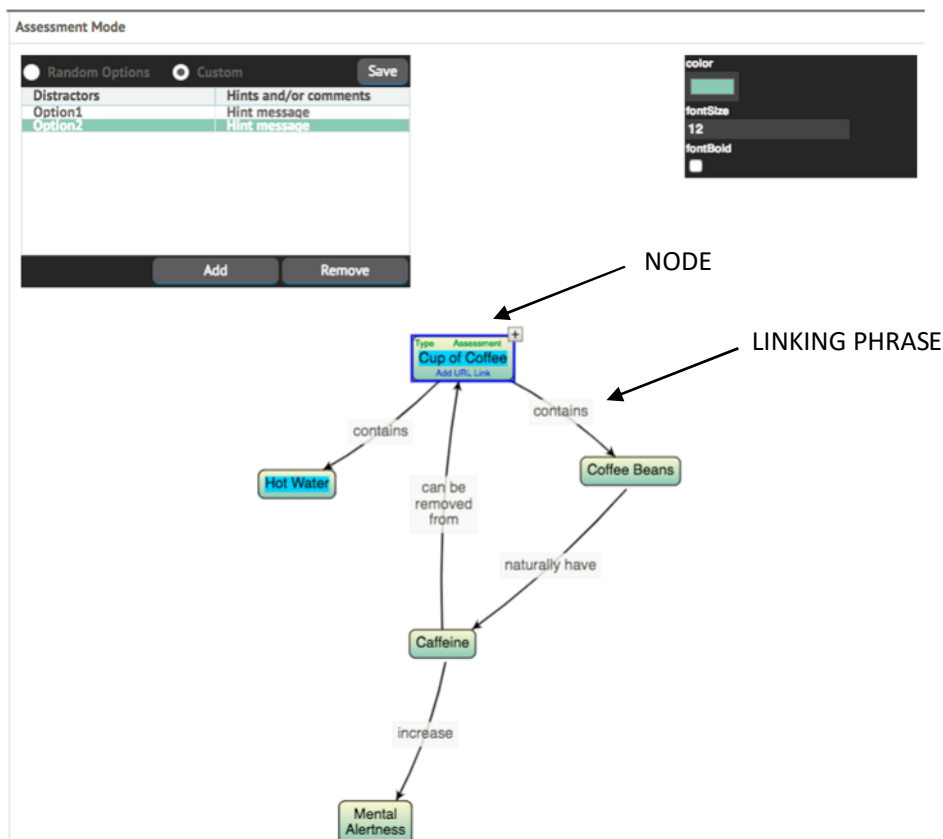
N.B. Teachers can override settings for individual students by clicking the button at the bottom right of screen



Assessment mode

Assessment mode allows teachers to provide a Scaffold map with fixed structure and enables students to select from predefined list of options for nodes and links.

Teachers can choose to either generate random options from the nodes and linking phrases in the Expert Map or define a set of Custom options (distractors) when editing a node or linking phrase in Assessment mode.



Edit Activity

Select the activity to be edited in the table of available activities within the teacher's folder, then click the "Edit" button. The feedback students will see is determined by the feedback settings configured by the teacher.

Delete Activity

Click the map to be deleted in the table of available activities within the teacher's folder, then click "Delete" button. Please note that if a student has submitted their map, to maintain data integrity that map cannot be deleted. If teachers do want to delete those submitted maps, please contact the Knowledge Maps administrator, who can delete them in the database.

Import

To import a knowledge or concept map (which can subsequently be used as an Expert Map as is, or edited further within Knowledge Maps), click the Import button, then select the file to be imported and click open. The system only accepts .cmap file and .cxl files. Such files can be generated within the freeware tool CMap Tools (<https://cmap.ihmc.us/>).

Export

Click the Export button to save the map to the local disk. The output file extension is .cmap. Such files can be imported and viewed within the freeware tool CMap Tools (<https://cmap.ihmc.us/>).

Management of Students' Submissions

Select the "Submission" tab to view all students' submissions for an activity.

1. Select the activity, then select the students ID to view their latest submission or click "Show historical version" to view all the student's submissions.
2. Select the activity, then click "Show summary report" button to view the summary report. Click "Save as PDF" link on the top of summary report page to save the report to the local disk.
3. Click "Export to Excel" button to save an Excel file to the local disk.