

KNOWLEDGE TRANSFER

Plugin name: Cohort grade report (Variation: Detailed Cohort grade report)

Version: 0.2.4/ (Variation version: 0.1.2)

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1. Introduction

Overview of the Plugin

The plugin's purpose is to give a custom report for moodle sites that track students in groups across various courses. It's main functionality is to give an option of selecting a group name from all the group names available from all courses and displaying the names and overall percentage grades for the users in that group across the courses the group with that name exists in.

Purpose of the document

The purpose of this document is to provide relevant information for users of the report and developers who may be expected to make further changes or customizations to the plugin.

2. Installation and Setup

Prerequisites

Minimum Moodle version required: 2020061500

Moodle development environment used: 4.1.5

Installation Instructions

The plugin can be installed via zip file in the Moodle plugin installation page or unzipped into the moodle/local/ directory

3. Plugin Features

List of Features

a. Cohort Grade Report

- Provides list of all groups across all courses on the Moodle site, which is submitted then report is generated.
- Export to Excel option which downloads excel file with name of group selected and timestamp of time of download time.
- Search option that searches all data values in all rows for search item.
- Data table has frozen names column allowing viewer to scroll with names staying fixed with scrolling.
- Course names are also hyperlinks that upon clicking redirect to course grader report for the selected group.
- Student names are hyperlinks to user profile pages.

- The grades shown on the report are weighted overall percentage grades calculated by the report plugin which is formulated to take into account grade categories and subcategories. The calculation disregards activities in the course that haven't been attempted by the student in order for the overall percentage grade to match the grades in the grader reports of each course. (The overall percentage grades are not stored in the Moodle database which is why grade calculations are done in the plugin to mirror the grader report calculations). For students who are not enrolled in the course "Not enrolled" is displayed and for students who have no grades in the course yet are displayed as "In progress".

b. Detailed Cohort Grade Report

- The only difference in the Detailed Cohort Grade Report variation is the "Start Date", "End Date" and "Duration" columns.
- The "Start Date" column is the date of enrollment for the student in the course.
- The "End Date" column is the course completion date of the student stored in the course_completions table in the Moodle database.
- The "Duration" column is the difference between the Start Date and End Date values in days.

4. User Guide

Where to find the plugin?

- The reports are accessible for Admin and Site Manager users from Site Administration > Reports.
- The reports are accessible for other users who are assigned the "Report Viewer" role, from home page second navigation bar.

How to use the plugin?

- After opening the plugin page, the desired group should be selected and the submit button should be clicked to generate the data table for the grades.
- To view the grader report of the course the column name can be clicked to redirect to the course grader report page.
- The Export to Excel button is used to export the table in excel sheet format.

5. Developer Guide

Plugin Architecture

- **version.php:** This file stores the release version, Moodle version requirement, and view permissions for the plugin.

- **settings.php:** This file stores the settings for the plugin that are set to NULL at time of writing and it stores the code that adds the plugin link to Site Administration > Reports tab.
- **lib.php:** This file contains the function that adds the plugin link to the home page secondary navigation bar for all users that have the capability: moodle/analytics:managemodels. This capability by default is only given to site managers and admin, additionally to the role of “Report Viewer” that is a custom role created and given only this capability.
- **lang/en/local_cohortreport.php:** This file contains the plugin strings definition.
- **styles.css:** Contains all styles applied to the plugin page and table.
- **index.php:** Contains all actual logic, functions and output of the plugin. Using PHP to generate the page content, JQuery for the data table generation that is generated via a CDN.

6. Appendix

Resources used

- Link for Moodle database structure and tables: <https://www.examulator.com/er/4.0/>
- Tables used: prefix_course, prefix_course_completions, prefix_grade_grades, prefix_grade_items, prefix_grade_categories, prefix_user, prefix_groups, prefix_groups_members, prefix_context, prefix_role_assignments, prefix_enrol, prefix_user_enrolments.
- Visual Studio code
- Moodle Development forums
- Moodle Development plugin skeleton generator
- Moodle Development docs