

CENTRE FOR TEACHING & LEARNING INNOVATION

Using Akindi for Administering and Grading Multiple Choice Tests

This document is an introductory guide to using **Akindi**. For more detail, visit the vendor documentation at https://akindi.com/pages/getting-started

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What is Akindi?

Akindi is an online assessment platform designed to streamline the process of grading in-person multiple-choice exams and assessments. It provides educators with a simple and efficient way to create, administer, and grade assessments using optical mark recognition (OMR) technology, without any reliance on special sheets or

dedicated scanners. Akindi simplifies the process of grading multiple-choice exams, saves time for educators, reduces grading errors, and provides valuable insights into learner performance.

Akindi also provides detailed analytics and reports on learner performance, item analysis, and class statistics. This can identify areas of strength and weakness, and saves you time by allowing you to regrade questions for the entire class.

How It Works

Akindi can be integrated with all your MyCanvas courses and your course gradebooks, and is accessed from within MyCanvas courses.

Generally, an Akindi-supported test is an in-class experience using test questions that are distributed on paper, or possibly displayed on a shared screen. The multiple-choice quiz questions can be created using a test generator or any other means. You may also use printed copies of quizzes that you've developed in MyCanvas.

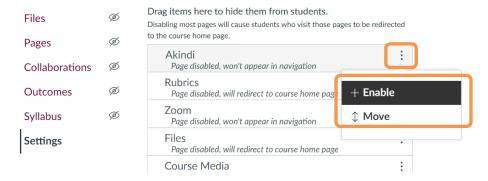
Similar to the Scantron system, Akindi uses Response Sheets ("bubble sheets") that learners use to fill out with their responses. With Akindi, you'll create the sheets yourself, and create an Answer Key that will be used to grade the completed sheets.

After the Response sheets are collected, you will scan the sheets using a regular scanner or one of the College's scanner/printers, creating a single or multiple PDF documents. Once the scan(s) are submitted to Akindi, the system reads and compares them against the Answer Key and grades the responses. At this stage, any inconsistencies, or "exceptions", can be addressed, and you can **Review & Fix**-adjust grades and scoring as desired. Ultimately you will share the grades with an existing gradebook item in the course Gradebook.

Accessing Akindi

Akindi is integrated with MyCanvas and is available in all MyCanvas courses at Mohawk. It is **disabled** by default, meaning that you must first **enable** Akindi if you expect to use it.

- To enable Akindi, you need to position the Akindi link on the course navigation menu. Go to the course Settings > Navigation, and enable Akindi, either by dragging it to the upper field of enabled links, or by clicking/pressing the more options (three dots) beside the Akindi entry and select +Enable.
- **Save** the configuration.

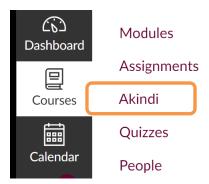


Enter Settings > Navigation, and enable Akindi

 Refresh the browser or return to the course **Home**. The Akindi link will be visible to Teachers, TAs, and Designers, but not visible to Students.

Note: an alternative to the course navigation menu access method is to create an unpublished Module item, linking to **External Tool > Akindi**.

1. To enter Akindi, click/press the **Akindi** link in your course navigation menu.



Launch Akindi from the link in the course navigation menu

2. You may need to authorize the integration, by clicking/pressing the **Authorize** button. Once authorized, the Akindi welcome message will display.

3. Click/press the orange **Launch Akindi** button.



Enter the Akindi system via the Launch Akindi button

4. The next screen you will see is your Akindi Dashboard, showing all your assessments in each of the courses for which Akindi has been enabled and used. Note that once in Akindi, you can navigate to any assessment in any of your courses.

Create the Course Grade Item

Eventually, you'll likely want the grades that are generated by an Akindi session to be shared to your MyCanvas course gradebook. This process usually involves associating, or linking, the specific Assessment in Akindi with a specific grade item in the gradebook.

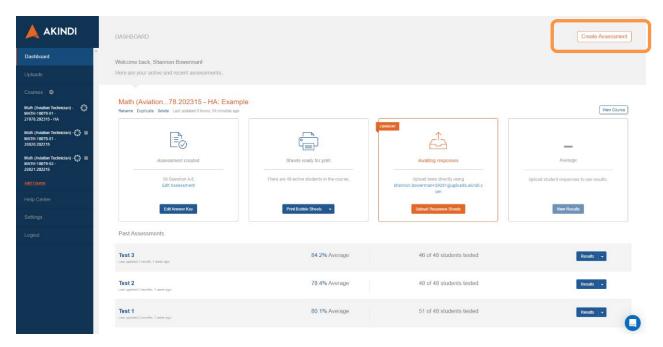
It is recommended, although not required, to create the grade item **before** you enter Akindi to create the Assessment. In this way, the addition of the new Assessment and its grade values will not disturb the existing points and weights of the gradebook. However, you can choose to create the grade item when sharing the Akindi grade values.

To create the "placeholder" grade item, simply create an empty Quiz (Classic or New) or Assignment (using the Assignments tool), making sure that the point value aligns with what will be the point value of the Akindi-delivered quiz. To minimize confusion, use the same name of the grade item as the name that you'll give the assessment in Akindi.

Creating a new Quiz or Assignment automatically creates a grade item of the same name in the course gradebook, and it is this grade item that you'll use to synchronize the grades from Akindi.

Preparing Response Sheets ("Bubble Sheets")

To create a new Response Sheet, enter the Akindi workspace via the **Akindi** link and click on **Create Assessment** in the top right-hand corner.

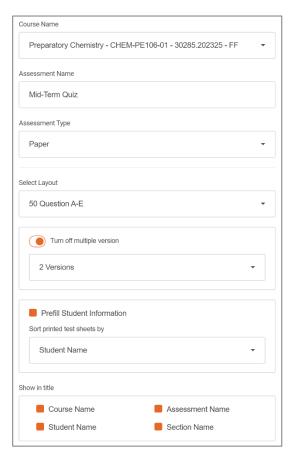


The Dashboard, showing various Akindi-enabled tests, and the Create Assessment button

Step 1- Create the Akindi Assessment

On the **Create Assessment** form, fill in the following information. Note that the course name, course code, CRN and semester will already automatically be included on the sheets.

- Choose your Course Name in the dropdown menu.
- In the Assessment Name field, enter the name of the quiz e.g. "Test 1", "Midterm Quiz", etc.
 If you have already created the quiz or assignment in MyCanvas, you should use the same name.
- For Assessment Type, choose Paper.
- In the **Select Layout** dropdown, choose **50 Question A-E** if there are 50 or less questions in the test. Select a different value to accommodate the number of questions in the quiz, or if there are more than 5 answer options for each question.

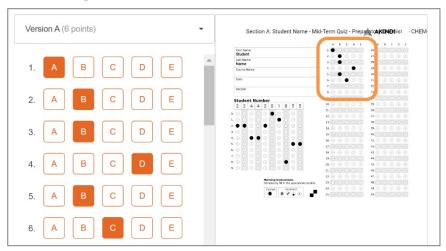


- Change the **Turn on multiple versions** to **on** if you wish to create than one version of the test. Once the setting is **on**, select the number of different versions that you'd like to create.
- Select Prefill Learner Information if you want learner name and learner number included on each bubble sheet. With this setting on, learners will not have to enter that information on their bubble sheets during the test, saving time and potential mistakes. Note that with personalized bubble sheets, the invigilator must assign each learner with the correct sheet.
- In **Show in Title**, confirm that all 4 options are selected.
- Click/press the orange Save & Continue button.

Step 2- Create the Answer Key(s)

In Step 2 you will create your Answer Key, indicating the correct responses to each question.

 While referring to your quiz questions, click/press the letter button that corresponds to the correct response for each question. Correct responses are indicated in orange. Choose multiple buttons for multi-select questions. Note that as you build the Answer Key, the correct bubbles will display in the depiction on the right of the screen.



Create an Answer Key for each version of your test

- If you choose to create more than one version in Step 1, be sure to choose each version in the drop-down selector and create each required Answer Key.
- Click/press Continue. If you wish to complete the Answer Key in the future, you can choose Skip for now. Just remember that you'll need to return to this step to enter the answers before uploading the completed tests for grading.



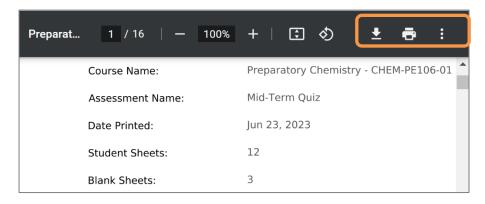
Step 3- Print the Bubble Sheets

In Step 3 you will print your bubble sheets.



Click/press Print Bubble Sheets.

 This will create and open a PDF document. At this point, you can choose to send the document to a printer, or download the document for printing in the future.

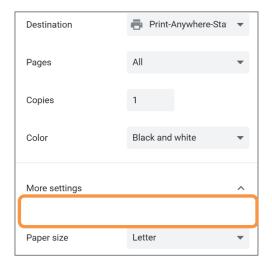


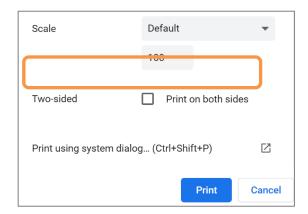
Once the PDF has been created, you can choose to **print** or **download**

- When printing the bubble sheets, be sure that:
 - the QR code is present
 - the 4 black registration squares are visible in each corner of the bubble sheets



- Also, in your printer settings, confirm that:
 - you've selected **Letter** size (11 x 8 ½") paper
 - you've chosen to print one-sided
 - the print scaling is 100%
- Click/press **Print** to print the bubble sheets.





Be careful to choose the correct print settings

Administering the Test

When administering your test, provide learners with the test questions, as well as a Response Sheet. If you chose to personalize the Sheets in Step 1, make sure the students receive the sheet that includes their name. If you are using more than one version of the test, be sure to provide the correct version to each learner. Note that this is a good opportunity to check learner ID cards to ensure the correct learner is taking the test.

During the Test: On their Response Sheets, learners will fill in the bubble(s) corresponding to their response for each question.

- The use of a pencil is recommended, as it allows the learner to easily change their response
- If a response cannot be erased, learners should be instructed to X-out their
 original response and fill in the bubble for their intended response. Once the
 sheets are scanned, double-responses like this, or any responses that are
 unclear on the sheets, will be indicated as **Exceptions**. You will use your
 discretion when grading these responses.

When collecting the completed sheets after the test has concluded, the sheets can be in any order.

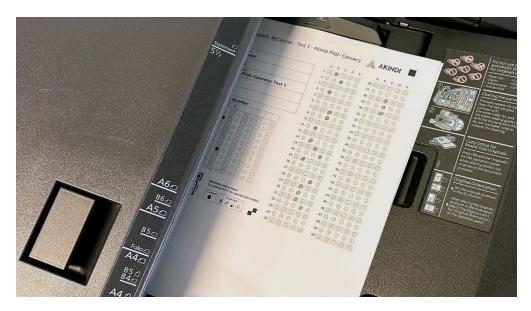
Scan the Bubble Sheets

Once all the bubble sheets have been collected, it's time to scan them to produce a file to send to the system. You may choose to save the file to a USB flash drive, or have the scanner email it to your account.

For simplicity, it's best to choose scan settings that will produce a **single** PDF document for all the bubble sheets. If those settings cannot be determined, you may also create one PDF for each bubble sheet, eventually submitting all the PDFs to the system.

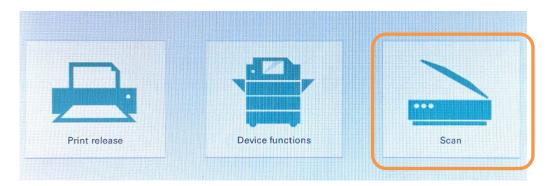
You can follow these instructions if using a standard Mohawk College networked scanner/printer:

1. Place the bubble sheets in the document tray **face up**.

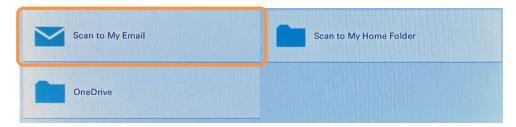


Stack the response sheets in the feeder

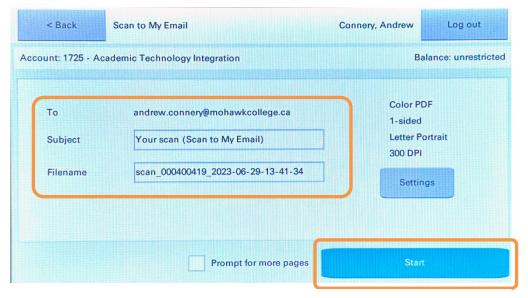
2. After authenticating, choose **Scan** on the printer's input panel.



3. Choose where you want the scan file to be sent. Many users choose to have the scan sent automatically to their College email account.



4. On the next screen, confirm your settings and click/press the **Start** button.



Confirm your settings and Start the scan

Tips:

- Scan only the sheets that learners have completed. There is no need to scan the blank sheets for learners who did not write the test(s). However, if you do scan unused sheets, you can remove them later.
- If you are unable to use the scanner, see your department support staff for



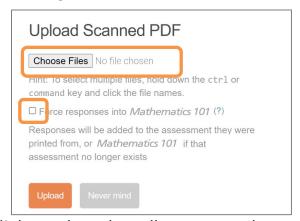
In Akindi, choose to Upload Response Sheets for the quiz or test

assistance. Alternatively, you can also share your completed bubble sheets with another individual to complete the scanning task.

Submit the Scanned Response Sheets

This is the final stage of the process, when you provide the scan(s) of the Response Sheets to Akindi, and it grades the responses.

- Return to your course in MyCanvas and launch Akindi via the course navigation menu link.
- Navigate in the Dashboard to the appropriate course and test.
- Click/press Upload Response Sheets.

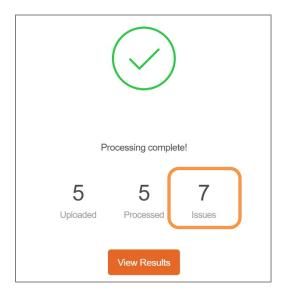


 This will open a dialogue box that allows you to browse your computer and search for the saved document for the scanned Response Sheets.

- Click/press **Choose Files**, search for the file or files you need.
- Deselect the "Force responses" selector.
- Click/press Upload. Once processed, Akindi will automatically grade the bubble sheets.

Viewing Results and Resolving Issues/Exceptions

Once the Response Sheet scans have been submitted, Akindi processes the data and quickly produces the grade results.



Successful processing of the Response Sheet scan(s)

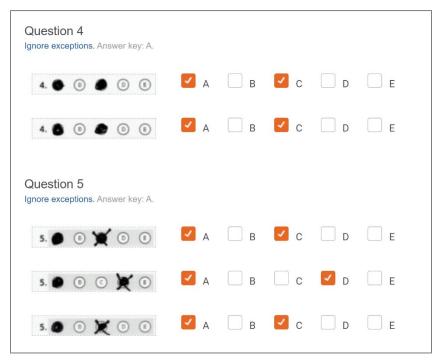
In the example above, there were 5 individual PDF documents uploaded, and all were successfully processed. The system discovered 7 "**Issues**" which are detailed below the **View Results** button.

What's an "Issue":

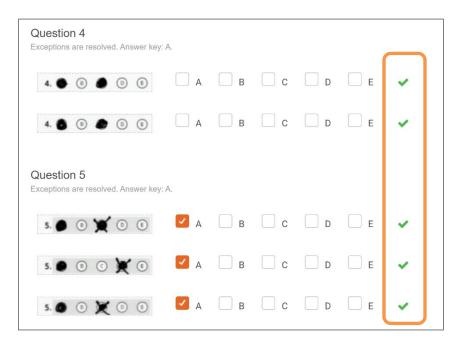
An Issue is any student response that is unclear to Akindi. These exceptions occur when student information is missing, if a student selects more responses for a question than the answer key contains, or partially fills a bubble. By default, Akindi marks such responses as incorrect.

You can choose to ignore the issues at this point by pressing/clicking **View Results**, or **Skip & View Results**, or you can address them immediately. If you choose to skip the Issues, you can return to them later under the **Review & Fix** tab.

Resolving Issues



Issues identified by Akindi. These issues can be addressed immediately by indicating the presumed intention of the student.



The same questions after the issues/exceptions have been manually resolved. Note the green checkmarks which indicate the issue has been resolved. Once the Issues have been resolved, click/press the **View Results** button.

When viewing the results, you can select from the tab options in the top left of the screen (**Graphs**, **Responses**, **Review & Fix**) in order to see specific results and any potential errors.



Overview Tab

This tab displays perhaps the high level, most vital information about the assessment and the student results, including the average grade, the highest and lowest grades, and the 3 "easiest" and 3 "most difficult" questions according to student responses. This can suggest which of your questions could be improved.

Graphs Tab

This tab contains the item analysis for all of your questions, including the grades, grades distribution, and answer breakdown.

Responses Tab

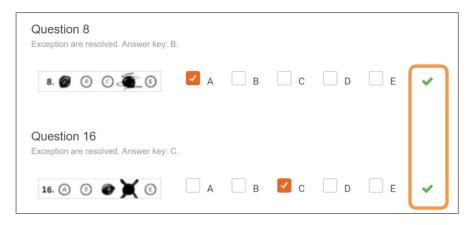
This tab presents the full spreadsheet view of all the students and their individual grades.

Review & Fix Tab

Akindi will automatically discover **Exceptions** if student information is missing or incorrectly filled, if a learner partially filled a bubble or provided more responses than the answer key contains, or if a page wasn't able to be graded. By default, Akindi marks such responses as incorrect.

- Click/press the Review & Fix tab to view any exceptions and to resolve any Exceptions.
- When reviewing the exceptions, click/press Ignore Exceptions under the question heading if you would like every response for that question to be marked as incorrect. To alter a student response for a given question, use the check boxes that appear next to the exception.

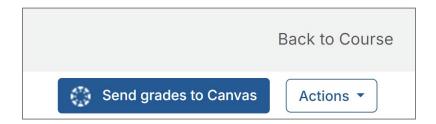
• To resolve the conflict, click/press the response(s) that you feel best reflects the learner's intention.



Once an exception is resolved, Akindi will display a green checkmark

Sending Grades to the Course Gradebook

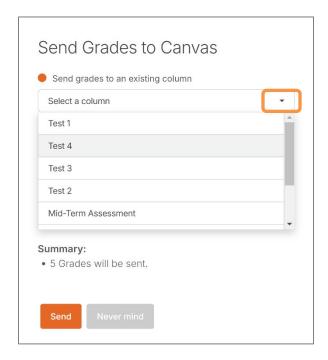
To send the grades to the course gradebook in MyCanvas, click/press **Send Grades to Canvas** in the upper right of the screen.



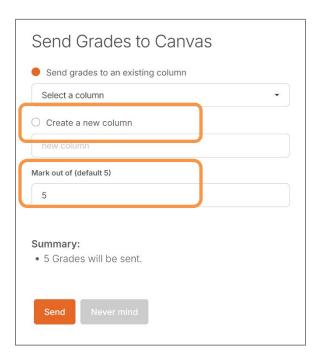
At this point you will associate/connect your Akindi assessment to a course grade item, by selecting an existing grade item that you've previously created or by selecting **Create a new assessment**: and entering an appropriate name.

After selecting or entering a new grade item, click/press **Send** to complete the grade transfer. Return to the course **Grades** to confirm that the grades are now available to learners.

After selecting or entering a new grade item, click/press **Send** to complete the grade transfer. Return to the course **Grades** to confirm that the grades are now available to learners.



If you've already created the grade item, select it from the dropdown list of items in the course.



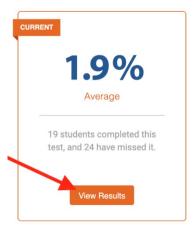
Alternatively, you can select **Create a new column** and enter an appropriate name. Be sure that the point value is correct.

After selecting or entering a new grade item, click/press **Send** to complete the grade transfer. Return to the course **Grades** to confirm that the grades are now available to learners.

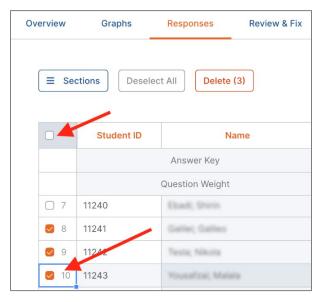
Recovering After Uploading Response Sheets to the Wrong Assessment

If you accidentally upload the scan(s) of your Response Sheets to the wrong assessment or to the wrong course, you can delete the results and re-upload the Response Sheets.

1. Navigate to the course, and click/press **View Results** on the course dashboard.



2. Go to the **Responses** tab.



Select all the student responses by selecting the checkbox in the upper left

3. If you wish to delete all the responses, click/press the checkbox in the table header. Alternatively, you can individually select the specific responses that you would like to delete.

4. The **Delete** button will display the number of students that are selected. Click **Delete**.



Click/press the Delete key to delete the responses

5. Return to the course Dashboard, and navigate to the appropriate course and assessment. Click/press **Upload Response Sheets** to re-upload the Response Sheets to the chosen assessment.

Tips

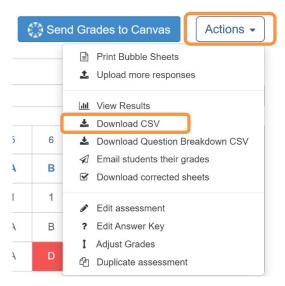
To save time, you can quickly **duplicate** an Answer Key to another course.

- 1. Create one assessment within a course.
- 2. To duplicate the assessment, click on the **Duplicate** button under the old assessment heading.
- 3. Enter the new assessment name, and select the other course in which you want to place the assessment.

Note: Duplicating an assessment will copy the answer key to the new assessment, but will not transfer any results.

You can download a spreadsheet with the grades to save to your records by clicking/pressing **Actions**. Also under the Actions menu you can:

- **Download question breakdown CSV**: this produces a spreadsheet containing question item analysis
- **Email students their grades**: this sends each student a secure link to access their individual student report
- **Download corrected test sheets**: this downloads a PDF containing each students corrected test sheet



There are various useful functions found under **Actions**